

APR 3 1945

PERIODICAL ROOM
GENERAL LIBRARY
UNIV. OF MICH



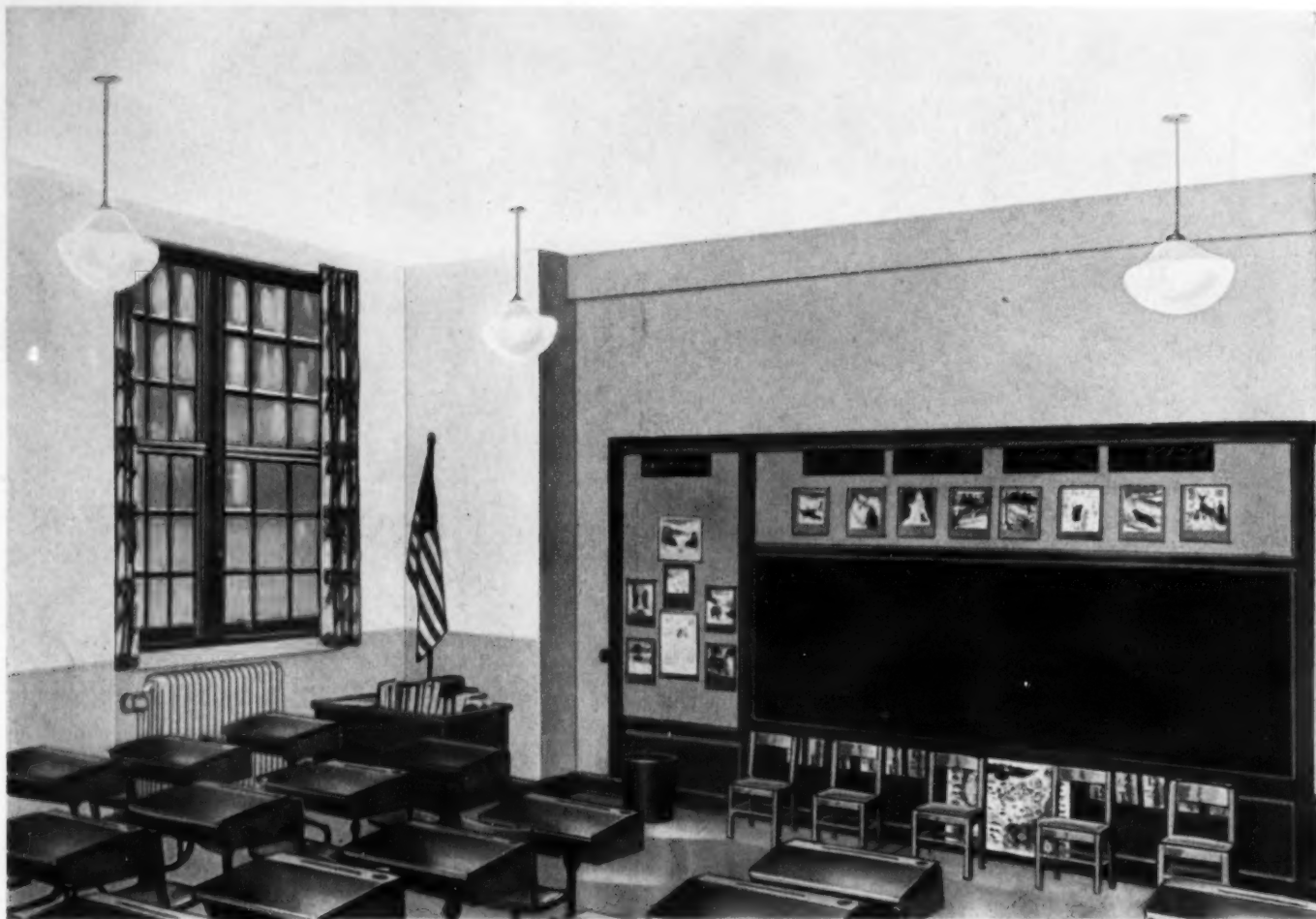
THE AMERICAN

School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION

VOLUME 110, NUMBER 4

APRIL, 1945



● Classroom in McKinley School, Wauwatosa, Wisconsin, painted according to the principles of COLOR DYNAMICS.

COLOR DYNAMICS

Purposeful use of energy in color to retard eye fatigue . . . stimulates pupils and teachers alike.

AN entire school building that promotes the health, happiness and safety of pupils and faculty alike!

That's the kind of institution yours, too, will be if you apply Pittsburgh's COLOR DYNAMICS in its color treatment—inside and out. The principles of this new science are based upon reactions of normal human beings to the *energy in color*!

It was conventional practice to paint all the rooms in monotonous of ivory, light buff or tan.

By applying COLOR DYNAMICS—school rooms are given color arrange-

ments in keeping with the activities for which the rooms are used.

Class rooms and study halls are painted in tones which diffuse instead of reflect light—to lessen eye fatigue and to assist concentration. Libraries are painted in tones that suggest peace and quiet. Foyers are friendly and inviting. Cafeterias are bright and cheerful. Auditoriums seem like open courts.

COLOR DYNAMICS is used to alter the appearance of rooms or corridors. Rooms can be made to seem longer or wider, ceilings to look

higher or lower, halls to appear wider and lighter.

And when you order paint—be sure to specify Pittsburgh! Made of "*Vitrolized Oils*", Pittsburgh Paints are more easily applied, stay *live*, tough, elastic—provide long-lasting paint protection!

You'll find the whole absorbing story of how *energy in color* is used by Pittsburgh in its new book, "COLOR DYNAMICS". Send for your free copy—today! Pittsburgh Plate Glass Co., Paint Division, Dept. AS-4, Pittsburgh 22, Pa.



PITTSBURGH PAINTS

PITTSBURGH PLATE GLASS COMPANY, PITTSBURGH, PA.
PITTSBURGH STANDS FOR QUALITY PAINT AND GLASS

66 E.
CH

Cove
Cart
Univ
The

Whe
The

War
A Ha

The
Su

Peru
Some

Geor

Radi

Radi

Perm

The

Joint

Art A

Plyw

What

Bette

Scho

(

The

St. J

EDIT

Dis

For

Sch

He

Wa

Ho

Scho

Scho

Scho

Person

Scho

Copy

register

Class

March

SUB

Canada

old, 35

DISC

Publica

of cha

VOL. 110
NO. 4

THE AMERICAN School Board Journal

APRIL,
1945

Central Office:
66 E. SO. WATER ST.
CHICAGO 1, ILL.

A Periodical of School Administration
Published on the first day of the month by
THE BRUCE PUBLISHING COMPANY
540 No. Milwaukee St. Milwaukee 1, Wisconsin

Eastern Office:
330 WEST 42ND ST.
NEW YORK 18, N. Y.

TABLE OF CONTENTS

Cover: High School, Westfield, Massachusetts — Tooke Studio Photo	
Cartoon: Placing the Responsibility Where It Belongs, <i>Morley</i>	17
Universal Training — A Middle Course, <i>G. A. Eichler</i>	18
The Importance of Objectives in Postwar Federal Education Programs, <i>Nolan Charles Kearney</i>	19
Where Does Your State Rank?, <i>Roy C. Woods</i>	21
The Administrator's Function in Redirecting Physical Education, <i>Frederick Rand Rogers</i>	24
War Babies, <i>Noel T. Myers</i>	26
A Half Century of State School-Board Associations, <i>Calvin Grieder and Stephen A. Romine</i>	27
The Continuance and Maintenance of a Rural School Program of Supervision, <i>Ruth Power Logan</i>	29
Peru Improves Its Arithmetic Instruction, <i>Cecil W. Martin</i>	31
Some Principles and Problems in Determining a Salary Policy, <i>Harold Spears</i>	32
Georgia's Teacher-Retirement System Begins Operation, <i>Ernest R. Anderson</i>	34
Radio Instruction in Chicago High Schools, <i>John W. Bell</i>	36
Radio in the Chicago Elementary Schools, <i>Douglas F. Van Bramer</i>	37
Permanent Teacher Tenure Versus School-Board Authority.....	38
The Reorganization of School Districts, <i>T. C. Holy</i>	39
Joint School and Community Planning, <i>Calvin Grieder</i>	41
Art Accommodations for Postwar Schools, <i>Leon L. Winslow</i>	42
Plywood for Schools, <i>Fred D. Mosher</i>	44
What Constitutes a Desirable Classroom, <i>J. W. Ramsey</i>	46
Better School Lighting is Possible, <i>George H. Watson</i>	48
School Boards to Conduct "Psychological Warfare" Against Tax- Objecting Railroads, <i>Herbert B. Mulford</i>	52
The Qualities of a School-Board Member.....	54
St. Joseph Adopts Rating Plan for Teachers, <i>E. F. Garvey</i>	58
EDITORIALS:	
Discussion as a School-Board Technique.....	50
For a Better Office of Education.....	50
School-Plant Reconditioning.....	50
Health Tests of School Employees.....	50
War Memorials and the Schools.....	51
Home Rule and States' Rights.....	51
School Law.....	56
School Administration in Action..	58
School Administration News.....	61
Personal News.....	62
School Finance and Taxation....	64
After the Meeting.....	83
School Board News.....	66
Teachers' Salaries.....	71
New Supplies and Equipment....	82
Publications for School Business	
Executives.....	82



Provisioning for 1945-46

With the approach of the fourth summer of war the task of providing for 1945-46 school operations looms up with problems of shortages and limitations far greater and more difficult than ever before. Reconversion will come slowly regardless of the war developments of the next 90 days. Considerable delays in the release of civilian goods must be anticipated, and little or no immediate relief can be expected in this direction.

Providing the educational requirements of 26,000,000 enrollment in public elementary and high schools for the coming year not only involves the "Tools of Education" but the rehabilitation of the school plant. School facilities have been utilized to the limit and the replacement of worn out, obsolete, and defective materials and equipment must now be made. Building repairs must be taken care of to protect the school property investment and situations hazardous to health and safety eliminated.

To meet this most difficult situation of continued school operations, start early on annual buying and on the rehabilitation work to be done during this summer. On new buildings and additions put your school architect to work at once. Unless you are already in touch with your regular sources of service take up your rehabilitation problems with them immediately. The advertising in the AMERICAN SCHOOL BOARD JOURNAL offers an excellent source of information and guidance in provisioning for the coming school year and an inquiry form is included on page 83 for your convenience in obtaining service and buying information.

JOHN J. KRILL

Copyright, 1945, by The Bruce Publishing Company. — All rights reserved. Title registered as Trade Mark in the United States Patent Office. Entered as Second-Class Mail Matter in the Post Office at Milwaukee under Act of Congress of March 3, 1879.

SUBSCRIPTIONS. — In the United States and Possessions, \$3.00 per year. In Canada, \$3.50. In Foreign Countries, \$4.00. Single copies, not more than three months old, 35 cents; more than three months old, 50 cents. Sample copies, 35 cents.

DISCONTINUANCE. — Notice of discontinuance of subscription must reach the Publication Office in Milwaukee, at least fifteen days before date of expiration. Notices of changes of address should invariably include the old as well as the new address.

Complaints of nonreceipt of subscribers' copies cannot be honored unless made within fifteen days after date of issue.

EDITORIAL MATERIAL. — Manuscripts and photographs bearing on school administration, superintendence, school architecture, and related topics are solicited and will be paid for upon publication. Contributions should be mailed to Milwaukee direct, and should be accompanied by stamps for return, if unavailable. Open letters to the editor must in all cases contain the name and address of the writer, not necessarily for publication, but as evidence of good faith.

The contents of this issue are listed in the "Education Index."

Member, Audit Bureau of Circulations.

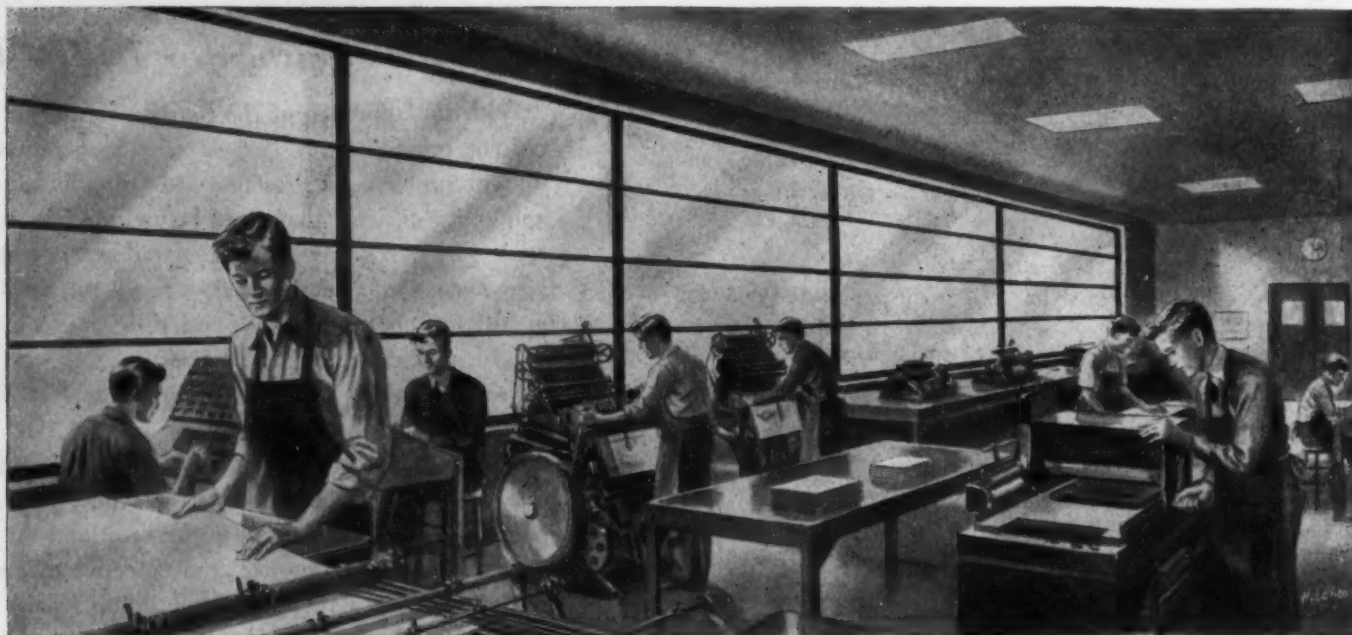
Suggestions

FOR THE MAN WHO'S PLANNING TOMORROW'S SCHOOL

School authorities and architects are taking a progressive viewpoint in choosing materials for tomorrow's schools.

They're selecting materials for function—for their ease of cleaning, for their durability, for the permanence of their finishes, for many other practical characteristics.

The result? A definite trend to glass. Your architect is familiar with the use of glass—how to employ it soundly and economically to make your school better in many ways. Discuss it with him. And for the right glass, see your L-O-F Distributor. Libbey-Owens-Ford Glass Company, 1345 Nicholas Building, Toledo 3, Ohio.



1 DAYLIGHT ENGINEERING—the use of glass to achieve better daylighting—has been given new impetus by the development of Thermopane, the Libbey-Owens-Ford window-pane that insulates. Thermopane is a double-glass unit with a hermetically-sealed, insulating air space between the panes.

With Thermopane you can make your windows far larger without causing excessive heat losses. Full information—including sizes, weights, and types of glass with which it can be fabricated—is given in our new Thermopane book. Write for your copy.



2 TRANSOM AREAS. These glass panels placed high to permit full use of wall space on either side, transmit borrowed light into the hall. Made of decorative glass, their clean, horizontal lines lend architectural beauty to the hallway.

3 WINDOW SILLS. L-O-F Vitrolite, a structural glass of colorful beauty, is ideal for this purpose. Sills are often dirt-catchers, but when they are glass, you can be sure they can be cleaned to a sparkling lustre every time, without harm to their finish.



LIBBEY • OWENS • FORD

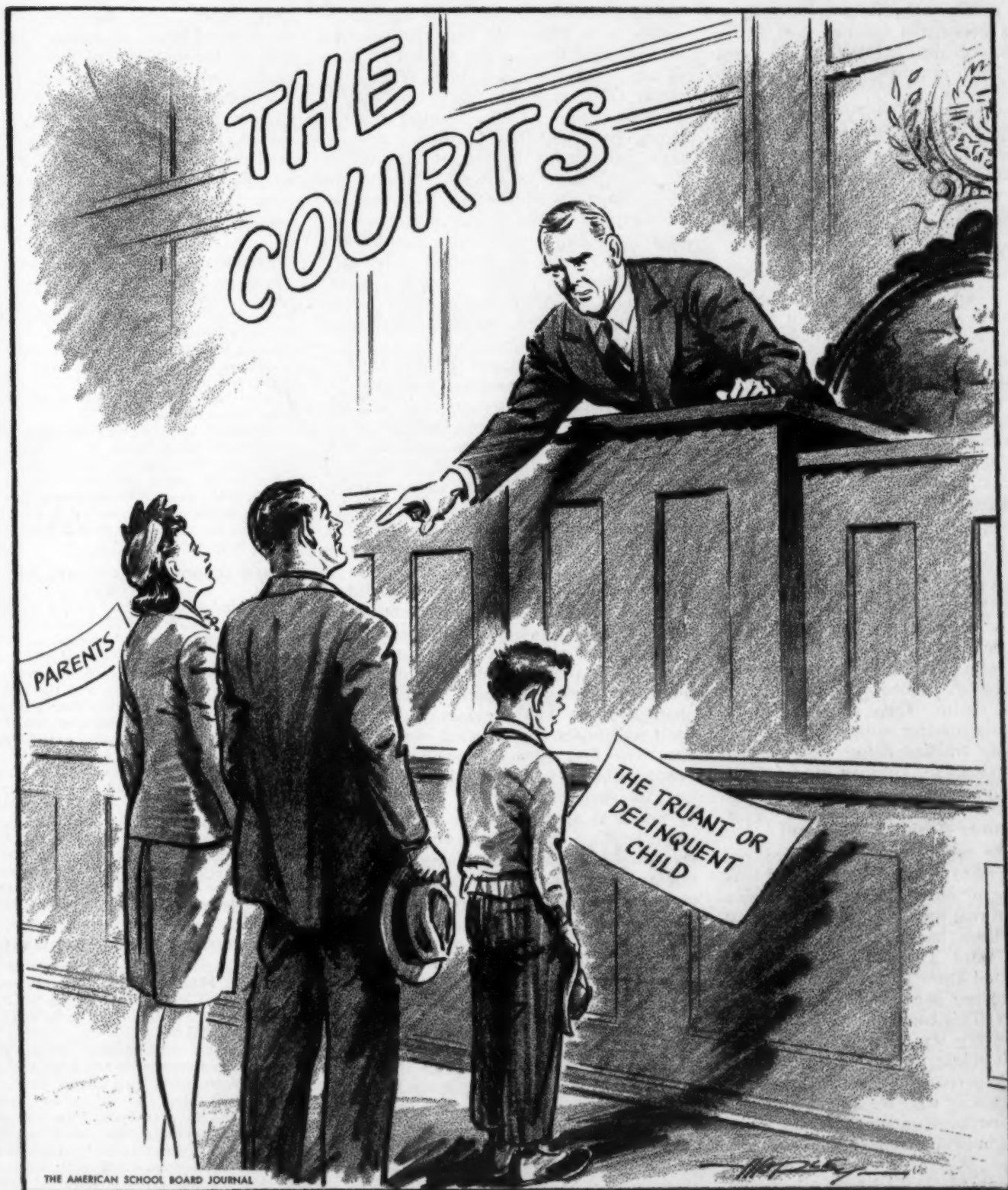
a Great Name in **GLASS**

THE AMERICAN School Board Journal

Volume 110, No. 4

APRIL, 1945

Subscription, \$3.00 the Year



PLACING THE RESPONSIBILITY WHERE IT BELONGS

Universal Training—A Middle Course

G. A. Eichler¹

Shall we give a year of military training to more than a million American youths annually as a means of guaranteeing the safety of our country against irresponsible aggressors? Many officials high in the councils of the nation have declared themselves as strongly in favor of such a plan. Veterans organizations with large memberships are pressing for legislation to bring this about.

Groups more peacefully inclined think that such an extreme measure is not only unnecessary but dangerous. They fear that strong military preparedness will lead again to war, and that it shows our lack of confidence in the kind of peace we are able to make and preserve.

When Will Next War Come?

These groups which hold such divergent points of view on this important subject will continue to oppose each other more or less violently, each having in mind the worthy objective of doing the country a great service. Since each group is extreme in its attitude it might be worth suggesting a middle course as a real solution of the problem.

To those who believe that it is absolutely necessary to the safety of the country to give at least a full year of military training to the more than a million boys attaining the age of 18 every year, we should like to say that it seems hardly possible that there will be another war for at least 15 or 20 years. We have about 13 million men in the armed forces now and it would seem that this should be a sufficient number of trained men to insure the safety we desire. Then why the undue rush to force another million boys a year into military training before we have had sufficient time to consider the matter thoughtfully?

Summer Training Sufficient

To those who would demobilize our armed forces to a mere skeleton and sink many ships of our magnificent navy as a requisite to real peace, we should say that unpreparedness has not kept us out of two world wars. This much we do know, but we do not know that preparedness will lead us into war as many peaceful-minded folks assert. This country has been unprepared for every war in which it has ever engaged. It might be in order to suggest that we try preparedness as an expedient to keep us out of war. We have nothing to lose and perhaps much to gain. The following "middle course" program is suggested.

It is proposed that all boys physically

¹Superintendent of Schools, Northampton, Pa.

and mentally capable be required to attend three 12-week training courses to be conducted during the summer. These training periods to follow the completion of grades 10, 11, and 12 respectively. In the case of boys who do not complete the high school course it is suggested that the summers during which they are 16, 17, and 18 years of age be the required summers. No boy under 16 years of age would be sent to a training camp. These training courses would be conducted at military reservations, suitable for the purpose, and not too far away from a boy's home. The direction of the camps would be under the war department. It should be required, however, that the military authorities and the department of public instruction of each state cooperate in such a way that the year-round program thus provided be integrated so that the maximum educational advantages would result.

It is further suggested that the time of these three training periods be divided between straight military training and related activities in a manner best calculated to develop in the boys the qualities of a good soldier as well as a good citizen. Such a program would involve 36 weeks of training, which is the length of the average academic year. It is quite possible that more could be accomplished in these three 12-week periods spread over three years as in one continuous year of training. Besides, this plan would not take a year out of a boy's life. The summer periods while a boy is going to school are not used in the same vital way as after the completion of school. The army now gives men a number of short courses. The program would lend itself well to the continuation of this practice. The first 12-week period might be devoted chiefly to basic training; the second, to specialized training; and the third to practical applications or field maneuvers. Boys of special aptitude would be encouraged to continue training along the military line. This would assure us of an unfailing supply of top-grade officer material.

Discipline Needed

There can be no doubt that boys participating in such a program would get much more out of their regular high school work after each of these training courses. There are some desirable habits along the line of discipline, citizenship, and health that can be developed more effectively in such training camps than in school or home. This is a point on which educators are sensitive. They assert that schools can do the job just as well. Maybe they can, but generally speaking, they have not done

too well in the past. If schools, homes, churches, and other agencies like the Boy Scouts, etc., which have an interest in boys would cooperate one hundred per cent in this matter, there would no doubt be much improvement. The plan proposed implies the cooperation of all agencies in the solution of the problem of national security and the development of responsible and intelligent citizenship. The plan should be adapted from time to time to changing conditions. Furthermore, the country will not need the man power of these boys after the war, and this plan would remove the boys from the labor market and give them something constructive to do.

SUMMER MEETING OF N.E.A. CANCELED

President F. L. Schlagle of the National Education Association has announced the postponement of the Representative Assembly Meeting of the Association, which had been scheduled for Buffalo, July 4-6, on account of war emergency conditions affecting railroads and hotels. The action was taken by vote of the Association's board of directors upon recommendation of the executive committee.

"Educators desire to do everything within their power," said Mr. Schlagle, "to bring the war to a speedy and victorious end, and to establish a just and enduring peace. Although this is the first time in forty years that the Association's annual meeting has been postponed, it is voluntarily co-operating to reduce travel and hotel congestion in the large centers."

MALDEN SCHOOLS OFFER CRAFTS AND MANUAL PROJECTS

The administrative staff of the public schools of Malden, Mo., had studied the idea of offering more work in crafts and manual projects in the schools over a period of several years. Two obstacles lay in the path until this year; namely, the lack of plant facilities and the lack of necessary funds. Last year two-wing additions were made to the elementary building, which released basement rooms which had formerly been used for classroom purposes.

At the present time, about 200 children in the upper grade department of the elementary schools are participating in the work. Sewing machines, workbenches, saws, vises, weaving looms, and other equipment have been installed, together with materials needed for the work. Mrs. Amelia Phelan, director of the fine arts program, is in charge of the work. It is planned to have a display of the work during the period from May 15 to 19.

RECEIVE GIFT OF FOREST TRACT

Mr. William T. Evjue, editor of the *Capital Times* of Madison, Wis., has presented to the Forestry Club of the Merrill High School, Merrill, Wis., a 560-acre tract, to be known as the Evjue Memorial Forest.

The area has been studied by the Wisconsin Conservation Department and a plan of harvesting and planting has been set up. Various school clubs will develop the region for recreational purposes and as a laboratory for the study of plant and animal life. The forest is the largest school forest in the state. Its location on the Wisconsin River only a few miles from the city and close to the Council Grounds State Park make it ideal for laboratory and recreation purposes.

The Importance of Objectives in Postwar Federal Education Programs

Nolan Charles Kearney¹

Educators are concerned about the administrative controls that may accompany postwar federal expenditures for education. There is a widespread assumption that federal appropriations for educational programs of various kinds will assume significantly greater proportions than ever before. Our allies in this war are already expanding greatly the sums of money they are spending on public education, and it may well be that after the war there will be an international race in education that will rival the armament races of the past—and for somewhat the same reasons! National security while carrying on a successful international competition may make "high educational standards" a critical commodity. The example of other nations as they develop their human resources might do more to loosen federal purse strings for education in America than the efforts of our educators alone could ever accomplish. It might be that our decentralized educational system would be greatly handicapped in any international race to achieve a high degree of technological education if it were not given generous federal support.

The great majority of educators will wish to insist that federal support be accomplished with a minimum of federal control in its broad aspects as well as in day-by-day interference in the details of administration. While few educators will challenge the great value that resulted from the educational programs of organizations such as the WPA, the NYA, and the CCC, yet the waste and inefficiency, the competition instead of cooperation, the limited vision and the conflicts in authority that so often were in evidence, have left a feeling that such situations should not be allowed to develop again. It is the opinion of the writer that many unfortunate circumstances resulted from a confusion of objectives by those who planned federal activities, and that many pitfalls may be avoided in the future if there is a clear distinction between objectives.

The Relief Motive in Recent Federal Aid

During the depression, there was, of course, widespread unemployment with a consequent loss in the good outcomes that result from job and income security, including the privilege of attending school and the ability to support good schools. The two objectives that arose from these two needs were to provide good and widely available educational opportunities and to

provide jobs. This is, of course, an oversimplification, but it is adequate for our purpose. There were many other objectives that had to do with overcoming the depression, and with alleviating its effects. In agriculture, construction, shipping and other fields, there were many ways in which employment was artificially stimulated besides the obvious one of providing jobs on NYA or WPA. Be that as it may, there remains a distinction between the educational objectives and the employment objectives of the programs.

As we think of the postwar economy, we are struck by the necessity to provide jobs—many jobs. We know that reserves invested by laborers in war bonds and in savings banks will not last long if their owners are unemployed or employed intermittently or at low wages. We know the same thing about the savings and the bonuses of returning veterans. The strong possibility exists that government, from time to time, will have to take up the slack in employment as our postwar economy works itself out. At the same time, we know that many young people will wish to resume interrupted educational programs or start new ones, that school-building programs will have to be resumed at an increased tempo to make up for years of inactivity and for increased demands, that maintenance and renovation will also have to be accelerated, and that instructional supplies and equipment of all kinds will have to be replenished as well as replaced by better equipment and by materials adjusted to the improvements in instruction brought about by the war.

In this contingency, we should insist on the distinction between objectives as each new federal program involving education is set up. Let us assume that federal aid is to be granted for a greatly expanded program of vocational education in vocational high schools and continuation high schools. Regardless of whether this program is instituted to better prepare people for jobs or to provide employment in the building and equipping of many needed schools, we must insist that it be regarded primarily as an educational program and administered as such.

Teachers or Relief Clients

Let us assume that there is need for 200,000 or more additional teachers in the schools of America over and above those that it is possible to employ under local budgetary conditions. This again becomes primarily an educational program. It will fail if the criterion for employment on the

program is the establishment of need or of relief status or of any other condition except the fitness of the various individuals to the various jobs to be done. It will fail if any administrators or personnel agencies other than the ones functioning in the organization where the prospective teacher will work are responsible for the selection of the candidates. It will fail if teachers' terms of service or conditions of service can be terminated or modified independently of the program of which they are a part. We must not fall into the fallacy of assuming that only unemployed persons should be employed when programs are expanded with federal aid. It is through a process of shifting employment that many necessary adjustments between job and worker are accomplished. If our national objective is something approaching the one hundred per cent employment of eligible workers, the employment in education of a person currently employed elsewhere will leave a vacancy to be filled someplace else and hence will not hinder employment objectives.

If a program is primarily educational, its salary provisions must be so flexible that they may be adjusted to equal those of the local programs of which they become a part. Salaries at a relief or subsistence level must not be tolerated in programs that are primarily educational, if we are to maintain educational standards in the schools and increase the attractiveness of the profession to outstanding students in our colleges and universities.

Although the assumption is far fetched, let us assume for the sake of clarification that a surplus of teachers develops after the war and that a program is to be developed for their employment. If the surplus is real in terms of educational needs—that is, if there is no needed educational program where these people can be employed—they should be given employment in some other field. If there is a necessary educational service for them to perform, their employment should result, not from their segregation and employment on the basis of their personal need, but rather by the development along educational lines of the necessary programs and their subsequent employment on the basis of fitness in competition with all other competent people.

Postwar Education vs. Military Training

Let us assume that after the war, in spite of spirited opposition, some form of partial or universal military conscription is to be set up. Let us assume that clear-

¹Director of Research, Department of Education, City of St. Paul, Minn.

cut objectives may be set up for conscription. What are they? Preparedness for war is too generalized and all-inclusive to serve as a working objective. It includes education, combat training, industrial development, conservation, and a host of other things. If it is combat training, it should be limited to that. If it is education, that should be achieved in the American way through the school systems of the country. If it is to keep young people off the labor market, it should be carefully examined to see if it is an efficient or sensible way to achieve that end, from the standpoint of full employment or national security. If it is decided that it is an efficient way to achieve that end, it should not then be confused as an educational program or allowed to drift into a degenerate form of education, competing with secondary, vocational, continuation, or higher education on a dual basis. There should be more to postwar economic planning than the pensioning of our elders and the segregation in armies and in educational institutions of our young men.

Let us assume that a great surplus of labor develops among draftsmen, construction workers, common labor, etc., and that a great federal and state construction program is launched. As a part of this program, many schools are to be planned, built, equipped, and operated. Uncontrolled from an educational standpoint, this will result in the construction of buildings in areas where labor surpluses exist, whether or not buildings are needed there. It may tend to perpetuate unfortunate educational subdivisions and may greatly increase inequalities in educational opportunity. Buildings may be poorly planned and constructed from the standpoint of their use in the program of the community where they are built. If the program is planned as an educational program and the educational objectives are kept clearly in the foreground, these pitfalls may be avoided in many cases. There still will remain the awarding of contracts and the consequent employment of available labor surpluses.

In no sense of the word is this proposal a blow to the rights of laborers to employment in or near their home communities. It is rather a plea for the right of labor to be employed at a real job, planned in terms of the real needs of the community and in terms of the service that the community has a right to expect. Communities that may not need expanded capital investments in school buildings may need other educational outlays or outlays in other public services.

Objectives Require Clarification

It may be that the same distinction in objectives could be made profitably in other areas where public works or employment programs may be instituted. Public health programs, safety programs, and flood control programs, to give a few ex-



Army Students Raising the Flag.

— Photo, Hamilton College, Clinton, N. Y.

amples, might well have primary objectives of a specialized kind that should be kept separate in the minds of the planners from the employment objective. My plea here, however, is limited specifically to educational programs. If we insist on keeping the educational objectives separate from the employment objectives even when both are operative, we may be able to think more clearly in administering education in the postwar days. We must analyze proposed legislation and proposed administrative regulations with this distinction in mind if we are to avoid the mistakes made before the war.

When the WPA organized its adult-education classes to employ unemployed teachers, it confused an educational need with an employment need, and the solution of an educational problem was taken over by an employment agency. When the NYA paid young people for part-time work so that they might go to school, it confused

the American right to an education with the American right to a standard of living that makes attendance at school possible. Furthermore, the work program did not tend to equalize educational opportunity. When the CCC put young men at work in our forests and, as an afterthought, provided them with a type of continuation education, it placed education in a secondary position for many to whom it should have been primary. There is no disposition on the part of the writer to question the great accomplishments of all these agencies or the integrity of the men who planned their activities. However, we learn by experience, and we can now see where and why much of the federal money expended did not efficiently achieve its educational purposes. It is probable that federal programs in education established after the war will be set up on a permanent basis and will establish precedents that it

(Concluded on page 78)

One of the most frequent questions asked by laymen and supporters alike in the field of education is: How does our state rank with others? Some ask it from idle curiosity, others from justifiable pride, and still others from a genuine desire to know the facts preparatory to improvement. During the periods when the legislatures are in session the answer may well have a direct bearing upon the new school budget.

While the question is frequently raised, the answer is not so easily found. No set of data is equally acceptable to all people. Neither is any scheme whereby the various data may be weighted and combined into an index number or rating scheme. Since such an index series would be developed from data selected by the investigator,

TABLE 1. The Need of Education

State	Population	Land area	Population per sq. mile	Median age of population	Population between 5-24 years of age	Sum	Composite rank
Ala.	16.0	27.0	20.0	44.5	13.0	120.5	24.0
Ariz.	38.0	5.0	44.5	38.5	43.0	169.0	42.0
Ark.	28.0	26.0	29.0	40.0	25.0	148.0	33.0
Calif.	4.0	2.0	27.0	1.0	6.0	40.0	2.0
Colo.	34.0	7.0	39.0	25.0	33.0	138.0	31.0
Conn.	29.0	46.0	4.0	10.0	30.0	113.0	17.0
Del.	46.0	47.0	10.0	14.0	47.0	164.0	40.0
Fla.	23.0	25.0	30.0	27.0	27.0	132.0	27.5
Ga.	13.0	20.0	23.0	41.0	11.0	108.0	15.0
Idaho	43.0	10.0	43.0	32.0	41.0	169.0	42.0
Ill.	3.0	23.0	9.0	7.0	3.0	45.0	3.0
Ind.	12.0	37.0	11.0	16.0	14.0	90.0	11.0
Iowa	21.0	22.0	26.0	17.0	23.0	109.0	16.0
Kans.	31.0	12.0	36.0	15.0	29.0	123.0	25.0
Ky.	18.0	35.0	15.0	38.5	16.0	122.5	23.0
La.	20.0	31.0	24.0	37.0	20.0	132.0	27.5
Maine	35.0	38.0	33.0	21.5	35.0	162.5	39.0
Md.	25.0	41.0	7.0	21.5	28.0	122.5	23.0
Mass.	8.0	44.0	3.0	4.0	9.0	68.0	5.5
Mich.	7.0	21.0	12.0	24.0	7.0	71.0	7.5
Minn.	19.0	13.0	31.0	23.0	19.0	105.0	13.0
Miss.	24.0	30.0	25.0	44.5	21.0	144.5	32.0
Mo.	10.0	18.0	21.0	10.0	12.0	71.0	7.5
Mont.	42.0	3.0	46.0	28.0	42.0	191.0	48.0
Neb.	32.0	14.0	37.0	20.0	32.0	135.0	29.0
Nev.	48.0	6.0	48.0	10.0	48.0	160.0	37.0
N.H.	44.0	43.0	22.0	6.0	44.0	159.0	36.0
N.J.	9.0	45.0	2.0	8.0	10.0	74.0	9.0
N.M.	41.0	4.0	44.5	47.0	40.0	176.5	45.0
N.Y.	1.0	29.0	5.0	3.5	1.0	39.5	1.0
N.C.	11.0	28.0	14.0	46.0	8.0	107.0	14.0
N.Dak.	40.0	16.0	40.0	37.0	36.0	169.0	42.0
Ohio	5.0	34.0	8.0	12.0	4.0	63.0	4.0
Okl.	22.0	17.0	32.0	33.0	22.0	126.0	26.0
Ore.	33.0	9.0	38.0	2.0	34.0	116.0	19.0
Penn.	2.0	32.0	6.0	26.0	2.0	68.0	5.5
R.I.	36.0	48.0	1.0	13.0	38.0	136.0	30.0
S.C.	27.0	39.0	18.0	48.0	24.0	156.0	34.0
S.Dak.	39.0	15.0	41.0	30.0	37.0	162.0	38.0
Tenn.	15.0	33.0	16.0	34.5	15.0	118.5	20.0
Texas	6.0	1.0	35.0	31.0	5.0	88.0	10.0
Utah	37.0	11.0	42.0	42.5	39.0	171.5	44.0
Vt.	45.0	42.0	28.0	18.0	45.0	178.0	47.0
Va.	17.0	36.0	17.0	34.5	18.0	122.5	23.0
Wash.	26.0	19.0	34.0	3.5	31.0	113.5	18.0
W.Va.	30.0	40.0	13.0	42.5	26.0	151.5	35.0
Wis.	14.0	24.0	19.0	19.0	17.0	93.0	12.0
Wyo.	47.0	8.0	47.0	29.0	46.0	177.0	46.0

*Professor of Education, Marshall College, Huntington, West Virginia.

WHERE DOES YOUR STATE RANK?

Roy C. Woods*

they are open to a possible deliberate choice of items favorable to one state; or to a very subtle influence growing unconsciously out of the interests and prejudices of the investigator or his special purpose for making the study. For example, a student of administration would emphasize an entirely different set of functions than a student of supervision. Again, one group could easily be concerned with finance and another, teacher preparation. In short, any index number is a composite of data selected by one or more persons with definite interests or specialized purposes. To a

TABLE 2. Ability to Pay for Education

State	Estimated per capita income of population 1940	Assessed value of property subject to property taxes	Per capita gross state debt*	Per capita gross local debt*	Savings and time deposits	Number depositors in savings and time	Income payments to individuals	Median wages received	Revenue per capita	Per capita costs of local government	School's indebtedness per pupil in A. D. A.	Interest payments per pupil in A. D. A.	Sum	Composite rank
Alabama	46.0	31.0	26.0	11.0	30.0	25.0	25.0	44.0	43.0	47.0	9.0	1.5	348.5	35.5
Arizona	28.0	41.0	9.0	41.0	43.0	42.0	43.0	23.0	8.0	7.0	30.0	32.0	347.0	34.0
Arkansas	47.0	39.0	45.0	2.0	39.0	38.0	34.0	47.0	46.0	48.0	17.0	18.0	420.0	48.0
California	5.0	4.0	41.0	43.0	4.0	4.0	4.0	3.0	4.0	2.0	44.0	44.0	202.0	9.0
Colorado	21.0	30.0	25.0	34.0	31.0	31.0	30.0	21.0	7.0	16.0	34.0	36.0	316.0	29.0
Connecticut	1.0	15.0	17.0	30.0	8.0	9.0	13.0	9.0	13.0	19.0	37.0	35.0	206.0	10.0
Delaware	3.0	45.0	21.0	24.0	33.0	35.0	41.0	16.0	3.0	28.0	20.0	12.0	281.0	21.0
Florida	26.0	27.0	1.0	45.0	32.0	30.0	23.0	41.0	32.0	21.0	42.0	43.0	363.0	41.0
Georgia	42.0	23.0	14.0	4.0	25.0	21.0	20.0	46.0	45.0	46.0	6.0	3.0	295.0	24.5
Idaho	27.0	42.0	10.0	36.0	42.0	41.0	44.0	27.0	31.0	14.0	27.0	23.0	364.0	42.0
Illinois	8.0	8.0	23.0	29.0	7.0	7.0	3.0	10.0	27.0	12.0	30.0	37.0	201.0	8.0
Indiana	20.0	9.0	6.0	8.0	13.0	14.0	10.0	14.0	28.0	23.0	16.0	16.0	177.0	3.0
Iowa	29.5	13.0	5.0	20.0	19.0	18.0	17.0	29.0	30.0	15.0	29.0	27.0	241.5	14.0
Kansas	29.5	16.0	15.0	14.0	34.0	34.0	28.0	28.0	40.0	22.0	19.0	38.0	317.5	30.0
Kentucky	40.0	17.0	11.0	5.0	24.0	32.0	22.0	36.0	42.0	45.0	4.0	14.0	292.0	23.0
Louisiana	36.0	26.0	47.0	23.0	29.0	24.0	24.0	43.0	20.0	34.0	22.0	29.0	357.0	38.0
Maine	23.0	34.0	46.0	3.0	18.0	16.0	36.0	31.0	18.0	30.0	7.0	4.0	266.0	16.0
Maryland	14.0	18.0	30.0	42.0	11.0	11.0	15.0	22.0	25.0	29.0	38.0	40.0	295.0	24.5
Massachusetts	7.0	6.0	48.0	46.0	2.0	3.0	7.0	11.0	23.0	5.0	1.0	7.0	166.0	2.0
Michigan	12.0	5.0	20.0	35.0	9.0	8.0	6.0	2.0	16.0	6.0	40.0	28.0	187.0	5.0
Minnesota	18.0	21.0	39.0	22.0	12.0	12.0	14.0	20.0	12.0	13.0	35.0	9.0	227.0	11.0
Mississippi	48.0	37.0	34.0	10.0	36.0	46.0	35.0	48.0	48.0	43.0	2.0	11.0	398.0	43.0
Missouri	22.0	12.0	28.0	16.0	15.0	13.0	11.0	26.0	30.0	39.0	28.0	31.0	271.0	19.0
Montana	16.5	46.0	22.0	27.0	40.0	39.5	37.0	17.5	11.0	20.0	23.0	5.0	264.5	15.0
Nebraska	32.0	20.0	2.0	28.0	38.0	37.0	32.0	30.0	41.0	27.0	32.0	19.0	338.0	32.0
Nevada	4.0	48.0	8.0	26.0	48.0	48.0	48.0	1.0	1.0	3.0	31.0	33.0	299.0	26.0
New Hampshire	24.5	35.0	27.0	13.0	20.0	23.0	39.0	25.0	19.0	18.0	13.0	13.0	267.5	17.0
New Jersey	6.0	7.0	25.0	47.0	5.0	5.0	8.0	4.0	24.0	4.0	46.0	47.0	228.0	12.0
New Mexico	37.0	47.0	42.0	21.0	47.0	47.0	45.0	34.0	9.0	38.0	10.0	22.0	399.0	44.0
New York	2.0	1.0	43.0	48.0	1.0	1.0	1.0	5.0	10.0	1.0	48.0	48.0	199.0	6.0
North Carolina	43.0	14.0	37.0	25.0	27.0	29.0	19.0	40.0	37.0	42.0	21.0	24.0	358.0	39.5
North Dakota	41.0	40.0	36.0	6.0	45.0	43.5	40.0	42.0	35.0	31.0	18.0	26.0	403.5	44.5
Ohio	13.0	3.0	4.0	31.0	6.0	6.0	5.0	6.0	17.0	10.0	41.0	41.0	183.0	4.0
Oklahoma	38.0	28.0	18.0	18.0	35.0	36.0	26.0	33.0	34.0	36.0	33.0	15.0	350.0	36.0
Oregon	19.0	33.0	33.0	39.0	26.0	27.0	29.0	12.0	15.0	17.0	25.0	30.0	300.0	27.0
Pennsylvania	15.0	2.0	29.0	38.0	3.0	2.0	2.0	15.0	14.0	24.0	43.0	46.0	233.0	13.0
Rhode Island	9.0	24.0	40.0	44.0	14.0	15.0	33.0	24.0	21.0	25.0	47.0	45.0	341.0	33.0
South Carolina	44.0	36.0	31.0	12.0	41.0	39.5	31.0	45.0	47.0	44.0	8.0	25.0	403.5	44.5
South Dakota	39.0	32.0	44.0	15.0	44.0	43.5	42.0	37.0	26.0	24.0	24.0	34.0	404.5	47.0
Tennessee	45.0	25.0	32.0	33.0	22.0	22.0	21.0	39.0	44.0	41.0	14.0	17.0	355.0	37.0
Texas	35.0	11.0	7.0	32.0	21.0	20.0	9.0	38.0	38.0	35.0	45.0	39.0	330.0	31.0
Utah	31.0	38.0	12.0	19.0	37.0	33.0	30.0	7.0	5.0	32.0	26.0	21.0	291.0	22.0
Vermont	24.5	43.0	24.0	7.0	23.0	28.0	46.0	32.0	22.0	33.0	11.0	6.0	300.5	28.0
Virginia	34.0	19.0	13.0	17.0	16.0	19.0	18.0	35.0	39.0	40.0	15.0	10.0	275.0	20.0
Washington	11.0	29.0	16.0	40.0	17.0	17.0	16.0	8.0	6.0	8.0	12.0	20.0	200.0	7.0
West Virginia	33.0	22.0	38.0	1.0	28.0	26.0	27.0	17.5	29.0	38.0	3.0	8.0	270.5	18.0
Wisconsin	16.5	10.0	3.0	8.0	10.0	10.0	12.0	13.0	33.0	9.0	5.0	15.0	130.0	1.0
Wyoming	10.0	44.0	19.0	37.0	46.0	45.0	47.0	19.0	2.0	11.0	36.0	42.0	358.0	39.5

*Low figure equals high rank.

TABLE 3. State's Effort to Provide Better Schools

State	Percentage of teachers who are male	Population per capita expenditure for schools	Enrollment per capita expenditure current	Enrollment per capita expenditure outlay	Current expense per pupil enrolled	Average instructional salary	School revenue per person 5 to 17 years	Per cent receipts from State	Expenditure per pupil in A. D. A. session	Average No. days schools in session	Per cent pupils transported	Per cent transportation costs to current expense	Annual cost per pupil in A. D. A. current expense and interest	Sum	Composite rank
Alabama	38.0	46.0	46.0	38.0	46.0	45.0	47.0	5.0	46.0	47.0	2.0	6.5	47.0	459.5	43.0
Arizona	9.0	8.0	21.0	7.0	25.0	15.0	20.0	27.5	16.0	39.0	27.0	31.5	18.0	264.0	15.0
Arkansas	6.0	48.0	47.0	44.0	47.0	47.0	45.0	12.5	47.0	18.0	18.0	18.0	46.0	460.5	44.0
California	27.0	2.0	2.0	1.0	3.0	2.0	2.0	11.0	2.0	18.5	39.0	45.5	2.0	157.0	2.0
Colorado	10.0	17.0	18.0	29.0	19.0	18.0	10.0	44.5	19.0	37.0	33.0	36.0	19.0	309.5	26.0
Connecticut	40.0	19.0	7.0	32.0	5.0	5.0	7.0	39.0	8.0	13.0	29.0	35.0	9.0	248.0	12.0
Delaware	19.0	10.0	10.0	3.0	11.0	9.0	14.0	1.0	10.0	5.0	9.0	16.0	13.0	131.0	1.0
Florida	43.0	38.0	37.0	35.0	38.0	23.0	33.0	9.0	36.0	38.0	8.0	20.5	35.0	393.5	38.0
Georgia	42.0	45.0	44.0	47.0	45.0	43.0	46.0	6.0	44.0	44.0	12.0	14.0	45.0	477.0	41.0
Idaho	2.0	15.0	30.0	19.0	30.0	29.0	22.0	34.0	30.0	28.5	20.5	12.0	29.0	301.0	24.0
Illinois	16.0	12.0	5.0	8.0	6.0	8.0	8.0	37.5	5.0	1.0	46.0	48.0	5.0	205.5	10.0
Indiana	3.0	24.0	24.0	22.0	23.0	16.0	24.0	25.0	25.0	35.0	3.0	6.5	24.0	253.5	13.0
Iowa	45.0	21.0	25.0	12.0	24.0	30.0	21.0	46.5	23.0	22.0	37.0	33.0	23.0	352.5	28.0
Kansas	28.0	16.0	26.0	18.0	28.0	31.5	26.0	35.0	26.0	32.0	45.0	39.5	27.0	369.0	33.0
Kentucky	13.0	44.0	41.0	43.0	41.0	41.0	43.0	14.0	41.0	46.0	26.0	18.0	40.0	451.0	42.0
Louisiana	34.0	37.0	39.0	14.0	39.0	34.0	39.0	7.0	39.0	40.0	4.0	5.0	39.0	371.0	34.0
Maine	35.0	39.0	36.0	48.0	37.0	38.0	36.0	32.0	38.0	16.0	20.5	9.5	38.0	443.0	40.0
Maryland	33.0	34.0	22.0	20.0	26.0	10.0	30.0	26.0	24.0	2.0	11.0	23.0	25.0	286.0	20.0
Mass.	29.0	22.0	6.0	30.0	4.0	4.0	16.0	37.5	6.0	18.5	4.0	43.0	7.0	265.0	17.0
Michigan	15.0	20.0	17.0	25.0	14.0	13.0	19.0	12.5	18.0	10.0	42.0	41.5	20.0	258.0	14.0
Minnesota	36.5	11.0	14.0	11.0	17.0	21.0	23.0	21.0	14.0	31.0	30.0	22.0	17.0	269.5	18.0
Mississippi	30.0	47.0	48.0	46.0	48.0	48.0	48.0	18.0	48.0	48.0	10.0	1.0	48.0	489.0	47.0
Missouri	24.0	36.0	29.0	42.0	32.0	26.0	27.0	20.0	28.0	24.5	36.0	34.0	28.0	386.5	36.0
Montana	11.5	6.0	9.0	6.0	7.0	23.0	4.0	41.0	9.0	20.5	18.0	4.0	10.5	169.5	5.0
Nebraska	44.0	32.0	31.0	40.0	29.0	40.0	31.0	46.5	32.0	14.0	47.0	47.0	30.0	463.5	45.0
Nevada	11.5	3.0	4.0	2.0	10.0	14.0	5.0	29.0	4.0	27.0	34.0	29.0	4.0	176.5	7.0
New Hamp.	23.0	28.0	20.0	5.0	20.0	22.0	28.0	44.5	21.0	17.0	25.0	9.5	21.0	293.0	22.0
New Jersey	26.0	4.0	3.0	16.0	2.0	3.0	3.0	43.0	3.0	4.0	32.0	41.5	3.0	183.5	8.0
New Mexico	20.0	14.0	33.0	15.0	34.0	27.0	38.0	3.0	31.0	24.5	22.0	2.0	32.0	295.5	23.0
New York	48.0	1.0	1.0	1.0	4.0	1.0	1.0	24.0	1.0	3.0	40.0	45.5	1.0	171.5	7.0
N. Carolina	41.0	41.0	42.0	36.0	43.0	36.0	41.0	2.0	43.0	42.0	1.0	20.5	44.0	432.5	39.0
N. Dakota	21.0	29.0	32.0	33.0	31.0	44.0	13.0	33.0	33.0	36.0	31.0	27.0	34.0	392.0	37.0
Ohio	5.0	9.0	11.0	10.0	13.0	12.0	9.0	19.0	15.0	6.0	13.5	25.0	14.0	161.5	3.0
Oklahoma	7.0	33.0	38.0	45.0	36.0	31.5	37.0	17.0	35.0	20.5	16.0	15.0	36.0	362.0	30.0
Oregon	32.0	25.0	16.0	23.0	18.0	20.0	11.0	48.0	17.0	30.0	13.5	24.0	15.0	292.5	21.0
Pennsylvania	8.0	13.0	12.0	27.0	16.0	11.0	17.0	27.5	13.0	7.0	35.0	37.0	12.0	235.5	11.0
Rhode Island	36.5	26.0	8.0	34.0	8.0	6.0	18.0	36.0	7.0	10.0	48.0	44.0	6.0	285.5	19.0
S. Carolina	41.0	43.0	45.0	41.0	44.0	46.0	44.0	10.0	45.0	43.0	28.0	18.0	43.0	491.0	48.0
S. Dakota	31.0	18.0	23.0	28.0	21.0	42.0	15.0	40.0	22.0	26.0	43.0	38.0	22.0	369.0	32.0
Tennessee	18.0	42.0	43.0	31.0	42.0	39.0	42.0	23.0	42.0	41.0	24.0	18.0	42.0	347.0	41.0
Texas	22.0	35.0	34.0	26.0	35.0	28.0	32.0	15.5	34.0	34.0	23.0	13.0	33.0	364.5	31.0
Utah	1.0	7.0	28.0	9.0	27.0	17.0	25.0	15.5	29.0	28.5	18.0	30.0	31.0	266.0	16.0
Vermont	47.0	30.0	27.0	17.0	22.0	35.0	34.0	31.0	27.0	8.0	38.0	31.5	26.0	373.5	35.0
Virginia	46.0	40.0	40.0	21.0	40.0	37.0	40.0	22.0	40.0	10.0	5.0	11.0	41.0	353.0	29.0
Washington	6.0	23.0	15.0	39.0	12.0	7.0	6.0	4.0	12.0	12.0	6.0	28.0	8.0	168.0	4.0
West Virginia	4.0	31.0	35.0	37.0	33.0	24.0	35.0	8.0	37.0	33.0	7.0	26.0	37.0	347.0	27.0
Wisconsin	17.0	27.0	19.0	24.0	9.0	19.0	29.0	30.0	20.0	15.0	44.0	39.5	16.0	308.5	25.0
Wyoming	25.0	5.0	13.0	13.0	15.0	25.0	12.0	42.0	11.0	23.0	15.0	3.0	10.5	202.5	9.0

*Smallest per cent equal rank of 1.

TABLE 4. Drawing and Holding Power of the School

State	Per cent 25 and over who com- pleted no school*	Per cent 25 and over who com- pleted high school	Per cent 25 and over who com- pleted college	Per cent 5 to 24 attending school	Median number years completed	Number enrolled in high school per 1000 between ages 14-17	Per cent enrollment is in high school	Number pupils in A. D. A. Number days each pupil en- rolled attended	Ratio pupils enrolled to popula- tion 5-17 years of age	Per cent pupils enrolled attend- ing daily	Sum	Composite rank		
Alabama	44.0	45.0	46.5	37.5	45.0	46.0	47.0	45.0	44.0	28.0	33.5	505.5	48.0	
Arizona	46.0	37.0	45.0	33.0	18.0	30.5	39.0	33.5	45.0	27.0	46.0	448.0	42.0	
Arkansas	29.0	40.0	11.0	8.0	41.5	42.0	45.0	43.5	47.0	22.0	44.0	419.0	39.0	
California	22.5	16.0	1.0	1.0	4.0	2.0	3.0	7.0	31.0	33.0	6.0	168.0	7.0	
Colorado	19.0	19.0	10.0	4.0	14.0	9.0	19.0	27.0	9.5	23.0	18.5	182.0	11.0	
Connecticut	36.0	26.0	21.0	15.0	20.0	23.0	23.0	8.0	25.0	5.0	31.5	4.0	237.5	18.0
Delaware	27.0	30.0	24.0	10.0	35.0	23.0	28.5	25.0	19.5	9.0	38.0	19.5	288.5	28.5
Florida	30.0	35.0	21.0	13.0	37.5	32.0	36.5	26.0	29.0	29.0	29.0	19.5	340.5	32.0
Georgia	42.0	45.0	42.0	42.5	47.0	45.0	41.0	36.5	43.0	15.0	36.0	478.0	44.0	
Idaho	2.0	2.0	17.0	24.0	10.5	9.0	6.0	21.0	31.0	1.0	31.0	167.5	6.0	
Illinois	24.0	21.0	23.0	20.5	30.0	23.0	21.0	9.0	22.0	6.0	39.0	22.5	261.0	25.0
Indiana	8.0	14.0	19.0	37.5	23.5	23.0	10.0	16.5	39.5	32.0	14.0	30.0	267.0	26.0
Iowa	1.0	1.0	12.0	32.0	9.0	14.5	13.0	24.0	6.0	26.0	10.0	28.0	176.5	8.0
Kansas	5.0	7.0	15.0	19.0	3.0	14.5	11.0	11.5	7.0	21.0	7.0	16.0	137.0	3.0
Kentucky	32.0	38.0	48.0	46.5	48.0	40.0	47.0	45.0	35.0	46.0	40.0	37.0	502.5	47.0
Louisiana	48.0	48.0	40.0	39.5	41.5	48.0	40.0	36.5	33.5	35.0	44.0	32.0	486.0	45.0
Maine	17.5	11.0	3.0	42.5	5.0	9.0	34.0	30.5	19.5	11.0	35.0	7.5	226.5	15.0
Maryland	25.0	33.0	36.0	15.0	39.5	36.0	39.0	32.0	46.0	4.0	48.0	13.5	377.0	36.0
Massachusetts	32.0	22.0	2.0	8.0	10.5	7.0	22.0	5.0	24.0	16.0	43.0	18.0	210.5	14.0
Michigan	20.5	23.0	21.0	34.0	7.0	18.0	28.5	14.0	39.5	1.0	41.0	1.0	248.5	23.0
Minnesota	9.0	13.0	25.0	29.5	16.0	23.0	16.0	19.0	11.0	27.0	34.0	21.0	243.5	20.0
Mississippi	43.0	46.0	47.0	45.0	39.5	45.0	48.0	47.0	48.0	3.0	39.5	499.0	46.0	
Missouri	14.0	24.0	33.0	35.5	31.0	32.0	26.0	29.0	16.0	34.0	16.0	41.5	332.0	31.0
Montana	11.5	12.0	18.0	15.0	18.0	14.5	12.0	11.5	5.0	17.0	30.0	16.0	180.5	10.0
Nebraska	3.5	6.0	13.0	27.5	2.0	11.5	8.0	16.5	3.0	20.0	9.0	25.0	145.0	4.0
Nevada	26.0	18.0	6.0	2.0	23.5	3.0	1.0	22.0	9.5	41.0	2.0	48.0	202.0	12.0
New Hampshire	20.5	15.0	14.0	27.5	27.0	14.5	33.0	20.0	12.0	14.0	47.0	16.0	260.5	24.0
New Jersey	35.0	27.0	26.0	12.0	26.0	28.0	15.0	11.5	14.0	8.0	25.0	11.5	238.0	19.0
New Mexico	47.0	43.0	35.0	24.0	29.0	37.0	38.0	42.0	41.0	40.0	17.0	47.0	439.0	41.0
New York	40.0	28.0	27.0	5.5	13.0	28.0	9.0	2.0	23.0	15.0	8.0	33.5	232.0	16.5
North Carolina	41.0	42.0	41.0	32.0	43.0	43.0	27.0	33.5	48.0	30.0	18.5	6.0	405.0	38.0
North Dakota	17.5	25.0	38.0	39.5	18.0	32.0	30.5	30.5	2.0	22.0	33.0	9.0	287.0	27.0
Ohio	16.0	17.0	16.0	24.0	18.0	14.0	6.0	36.5	3.0	31.5	3.0	203.0	13.0	
Oklahoma	22.5	31.0	31.5	17.5	8.0	28.0	25.0	33.5	27.0	25.0	11.5	28.0	288.5	28.5
Oregon	3.5	3.0	7.0	8.0	21.0	5.5	7.0	1.0	15.0	28.0	11.5	26.0	136.5	2.0
Pennsylvania	33.0	29.0	31.5	29.5	28.0	35.0	18.0	15.0	38.0	7.0	37.0	11.5	292.5	30.0
Rhode Island	37.0	32.0	29.0	20.5	32.0	36.0	26.0	17.0	18.0	45.0	28.0	352.5	33.0	
South Carolina	45.0	47.0	45.0	17.5	44.0	47.0	43.0	41.0	28.0	42.0	24.0	38.0	461.5	43.0
South Dakota	6.5	12.0	30.0	37.5	12.0	23.0	17.0	23.0	1.0	24.0	22.0	24.0	232.0	16.5
Tennessee	34.0	39.0	39.0	44.0	45.0	40.0	44.0	44.0	31.0	39.0	26.0	35.0	420.0	40.0
Texas	38.0	36.0	28.0	24.0	36.0	23.0	20.0	28.0	19.5	38.0	36.0	39.5	366.0	34.0
Utah	10.0	4.0	5.0	3.0	1.0	1.0	4.0	4.0	42.0	12.0	13.0	5.0	104.0	1.0
Vermont	11.5	8.0	9.0	32.0	23.5	11.5	42.0	35.0	8.0	10.0	42.0	13.5	246.0	21.0
Virginia	39.0	41.0	37.0	24.0	46.0	41.0	37.0	40.0	43.5	13.0	20.0	22.5	404.0	37.0
Washington	6.5	5.0	4.0	5.5	15.0	5.5	2.0	3.0	31.0	37.0	4.0	45.0	153.5	5.0
West Virginia	28.0	34.0	43.0	41.0	34.0	38.0	35.0	38.0	29.0	19.0	22.0	7.5	368.5	35.0
Wisconsin	14.0	20.0	34.0	35.5	6.0	32.0	24.0	11.5	19.5	2.0	46.0	2.0	246.5	21.0
Wyoming	14.0	7.0	8.0	11.0	23.5	4.0	5.0	18.0	4.0	36.0	5.0	43.0	178.5	9.0

*Smallest per cent equal rank of 1.

person with similar interests or purposes the index number would be satisfactory, whereas to others its validity would be open to severe attack. A most serious difficulty is encountered in the absence of data on certain subjective but important avenues of school effort which should but probably cannot be included in a statistical study at this time.

Mort wrote that:

... the need of indexes which would be equitable in their treatment of various types of communities has been present in nearly every state from the very inception of the program of tax-supported public education.¹

In a bulletin released by the National Education Association attempting to make an estimate of state school efficiency, the foreword of the bulletin stated that:

Estimates of school efficiency will be made as long as people are sufficiently interested in education to establish and maintain schools. The citizens of each of the forty-eight states in the Union want to know how the state school system which they support compares with those of the other states. Educators are eager to compare the effects of different plans of organization and methods of teaching. Such comparison is not only inevitable but also desirable. A standard of judgment and critical attitude are necessary to progress. . . .

While the development of a perfectly satisfactory scale for rating school efficiency is still a task for the future, every honest attempt to evaluate the achievement of school systems is a step toward its final solution.² . . .

Statistical analysis of state school efficiency is defined as the direct measurement or counting of quantitative facts. It usually involves the combination of these facts into a single index or estimate of efficiency.³ . . .

No formula for measuring state school efficiency by means of a single mathematical quantity has yet been discovered. In the light of present knowledge it is impossible to combine a series of factors related to school efficiency and to draw from this combination an acceptable single index. The interplay of forces is so complex and differs so greatly from state to state that the discovery of such a formula must await the results of long and patient research and the development of new technics and measuring devices.⁴ . . .

Fortunately, however, a formula is not necessary in order to present significant data relative to the present educational status of the forty-eight states. It is entirely possible to name a number of factors which are generally conceded to be closely related to the efficient functioning of a school system. Practical experience and educational research combine to demonstrate that certain of these factors are essential, not only to the progress, but to the very operation of an effective school organization, and that progress in any of these results in the advancement of the whole school system.⁴ . . .

Smith and Wright stated that:

Although the organization and administra-

TABLE 5. Composite Ranking on Four Categories

State	Need for education Table 1	Ability to pay for education Table 2	Effort to provide for education Table 3	Drawing and holding power Table 4	Sum	Composite rank
Alabama	24.0	35.5	43.0	48.0	150.5	43.5
Arizona	42.0	34.0	15.0	42.0	133.0	37.0
Arkansas	33.0	48.0	44.0	39.0	168.0	46.0
California	2.0	9.0	2.0	7.0	20.0	1.0
Colorado	31.0	29.0	26.0	11.0	97.0	21.0
Connecticut	17.0	10.0	12.0	18.0	57.0	10.0
Delaware	40.0	21.0	1.0	28.5	100.5	23.0
Florida	27.5	41.0	38.0	32.0	138.5	40.0
Georgia	15.0	24.5	41.0	44.0	124.5	34.0
Idaho	42.0	42.0	24.0	6.0	114.0	30.0
Illinois	3.0	8.0	10.0	25.0	46.0	6.0
Indiana	11.0	3.0	13.0	26.0	53.0	9.0
Iowa	16.0	14.0	28.0	8.0	66.0	14.0
Kansas	25.0	30.0	33.0	3.0	91.0	19.0
Kentucky	23.0	23.0	42.0	47.0	135.0	39.0
Louisiana	27.5	38.0	34.0	45.0	144.5	42.0
Maine	39.0	16.0	40.0	15.0	110.0	28.5
Maryland	23.0	24.5	20.0	36.0	103.5	24.5
Massachusetts	5.5	2.0	17.0	14.0	38.5	5.0
Michigan	7.5	5.0	14.0	23.0	49.5	8.0
Minnesota	13.0	11.0	18.0	20.0	62.0	13.0
Mississippi	32.0	43.0	47.0	46.0	168.0	46.0
Missouri	7.5	19.0	36.0	31.0	93.5	20.0
Montana	48.0	15.0	5.0	10.0	78.0	16.0
Nebraska	29.0	32.0	45.0	4.0	110.0	28.5
Nevada	37.0	26.0	7.0	12.0	82.0	17.0
New Hamp.	36.0	17.0	22.0	24.0	99.0	22.0
New Jersey	9.0	12.0	8.0	19.0	47.0	7.0
New Mexico	45.0	44.0	23.0	41.0	153.0	45.0
New York	1.0	6.0	7.0	16.5	30.5	2.0
N. Carolina	14.0	39.5	39.0	38.0	129.5	35.0
N. Dakota	42.0	44.5	37.0	27.0	150.5	43.5
Ohio	4.0	4.0	3.0	13.0	34.0	3.5
Oklahoma	26.0	36.0	30.0	28.5	120.5	33.0
Oregon	19.0	27.0	21.0	2.0	69.0	15.0
Pennsylvania	5.5	13.0	11.0	30.0	59.5	12.0
Rhode Island	30.0	33.0	19.0	33.0	115.0	31.5
S. Carolina	34.0	44.5	48.0	43.0	169.5	48.0
S. Dakota	38.0	47.0	32.0	16.5	133.5	38.0
Tennessee	20.0	37.0	41.0	40.0	138.0	40.0
Texas	10.0	31.0	31.0	34.0	106.0	26.0
Utah	44.0	22.0	16.0	1.0	83.0	18.0
Vermont	47.0	28.0	35.0	21.0	131.0	36.0
Virginia	23.0	20.0	29.0	37.0	109.0	27.0
Washington	18.0	7.0	4.0	5.0	34.0	3.5
W. Virginia	35.0	18.0	27.0	35.0	115.0	31.5
Wisconsin	12.0	1.0	25.0	21.0	59.0	12.0
Wyoming	46.0	39.5	9.0	9.0	103.5	24.5

tion of the public school system in the United States are matters of State concern and there is no national system of education as in most countries, yet the American people as a whole agree on many of the principles that underlie educational policies and practices. Moreover, since professional and scientific activities are little affected by the geographical boundaries of states, the schools show in their plans and methods many more points of likeness than of difference. Indeed, a visitor from another land in visits to even widely separated school systems would find little visible evidence that they were operating under various distinct authorities wholly independent of one another. Therefore, in spite of the fact that each state is completely autonomous, it is possible to secure from them comparable educational

statistics and to draw conclusions that are valid.⁵

The first comprehensive attempt at rating states on a scale of comparison was made by Ayres⁶ in 1912. This was followed eight years later by his second index⁷ which was based on ten sets of data which to him would reflect the status of education in each country. In this second study Ayres stated:

If some great national agency were to undertake a survey of each of the 48 state school systems, it would surely report on many phases of their work not included in the items of the index. Among such phases would be the legal bases of the system, its organization, professional leadership and supervision, business management, course of study, teaching staff, plant and equipment, and the results of standard tests of classroom work.⁸

He computed index numbers for each year between 1871 and 1918 for the entire United States and for the individual states in 1890, 1900, 1910, 1916, and 1918. While his system and figures were widely used, much criticism was directed toward them. This led to many attempted refinements of the method used in developing the index numbers. These criticisms were summarized by Frank M. Phillips, who was Chief of the Statistics Division of the United States Office of Education in Washington, D. C.⁹

In 1924, Phillips^{10, 11} attempted to revise the figures used by Ayres by correcting for the purchasing power of the dollar according to the cost-of-living index of the Bureau of Labor statistics. Later with a slightly different set of data, he computed educational indexes for 1920, 1922, 1924, and 1930. While these sets of indexes are not entirely comparable, they do give a series of index numbers whereby the progressive rank of any state can be charted.

Many other attempts were made at educational rankings, among which are those of Schrammel,¹² Schrammel and Sonnenberg,¹³ Scates,¹⁴ Furney,¹⁵ and Witham.¹⁶

¹Payson Smith, Frank W. Wright, et al., "Education in the Forty-Eight States," Staff Study No. 1, prepared for the Advisory Committee on Education, Washington, D. C., 1939, p. 13.

²Leonard P. Ayres, "A Comparative Study of the Public School Systems in the Forty-Eight States," Russell Sage Foundation, New York, 1912.

³Leonard P. Ayres, "An Index Number for State School Systems," Russell Sage Foundation, New York, 1920.

⁴*Ibid.*, p. 58.

⁵Frank M. Phillips, "Educational Ranking of States by Two Methods," AMERICAN SCHOOL BOARD JOURNAL, Vol. 69, pp. 47-49, December, 1924.

⁶Frank M. Phillips, "Educational Rank of States, 1924," AMERICAN SCHOOL BOARD JOURNAL, Vol. 72, p. 47, April, 1926.

⁷Frank M. Phillips, "Educational Rank of States, 1930," AMERICAN SCHOOL BOARD JOURNAL, Vol. 84, February, pp. 25-29; March, 37-39; April, 29-30, and May, 39-40.

⁸H. E. Schrammel and E. R. Sonnenberg, "The Rank of States According to Educational Achievement on the Basis of Eleven Selected Criteria," AMERICAN SCHOOL BOARD JOURNAL, Vol. 93, p. 17, November, 1936.

⁹Harry E. Schrammel, "The Organization of State Departments of Education," Ohio State University, Bureau of Educational Monographs, No. 6, Chap. 9, Ohio State University Press, Columbus, Ohio, 1926.

¹⁰Douglas E. Scates, "Revised Index Number of State School Systems," AMERICAN SCHOOL BOARD JOURNAL, Vol. 94, p. 52, June, 1937.

¹¹Lester C. Furney, "Ranking State School Systems by Educational Efficiency Measures," Vol. 99, p. 27, July, 1939; and p. 41, August, 1939.

¹Paul R. Mort, "State Support for Public Education," The American Council on Education, United States Department of the Interior, Office of Education, Washington, D. C., 1933, p. 90.

²Research Bulletin, "Estimating State School Efficiency," Vol. X, No. 3, May, 1932, p. 78, National Education Association, Washington, D. C.

³*Ibid.*, p. 104.

⁴*Ibid.*, p. 113.

In three articles Angoff and Mencken¹⁷ discussed what they thought would be "The Worst American State." They listed twenty-six tables on wealth; twenty-four on education and general culture; eleven on health; and two on public order. From these they computed a final rank index for the states. They maintained that these tables were built from data which had been "selected for their apparent fairness."¹⁸

Since these ratings were made, new data^{19, 20, 21} have been made available and curiosity has prompted a new compilation

¹⁷Ernest C. Witham, "Public School Progress," AMERICAN SCHOOL BOARD JOURNAL, Vol. 75, p. 37, October, 1927.

¹⁸Charles Angoff and H. L. Mencken, "Worst American State," *American Mercury*, Vol. 24, September-November, 1931, pp. 1-16; 175-188; 355-371.

¹⁹*Ibid.*, p. 353.

²⁰United States Department of Commerce, Census Bureau, Washington, D. C., 1944, "(a) State Finances 1943, (b) Statistical Abstracts of the United States 1943, (c) Census Report for 1940."

²¹The National Industrial Conference Board Inc., "Bulletin released to cooperating members, New York City, 1944.

of data for the purpose of determining where each state falls in relation to each other in this matter of public education. These data were compiled by ranks into four tables designed to answer:

1. The need of the State for education for which there were five sets of data available that seemed to show educational need.

2. The ability of the state to support education for which there were twelve sets of data available.

3. The effort of the state to supply a better system of education for which there were thirteen sets of data available.

4. The drawing and holding power of the educational systems of the states for which there were twelve sets of data available.

Any defense for the choice of any item

²²United States Office of Education, "Biennial Surveys of Education in the United States for 1940-1942," Washington, D. C., 1944.

listed would necessarily be that of the author and would probably not convince any reader who questioned its use anyway. Tables 1, 2, 3, and 4 are submitted for what value they may have to the curious and as stimuli to the skeptic, "to go thou and do likewise." Table 5 attempts to compile the composite rating of the states in each of the four categories into a single ranking scheme for all states. No conclusions can be drawn from these data, but individuals might with interest and some profit compare the present position of their individual states with that held in any of the former studies. In the case of one state at least these figures showed that, while undoubtedly great progress had been made in its educational offerings, the relative ranks remained essentially the same; that while the state had moved forward the other states in the nation had done so too and the relative positions had not been seriously changed. *How about your state?*

The Administrator's Function in Redirecting Physical Education

Frederick Rand Rogers, Ph.D.¹

A

In our first article we revealed that the chief stumbling blocks to the adoption of physical education reforms are chiefly (candor and the national welfare compelled us regretfully to record) a small number of leaders in physical education who have led field workers steadily away from physical fitness as an aim.

Because of this opposition, which is on the increase, school boards, superintendents, principals, and college presidents cannot effect the regeneration of physical education merely by instructing incumbents in supervisory offices to investigate and act on programs conspicuously successful elsewhere. For administrators who attempt this easy expedient have already heard the retorts: "These programs are too difficult for our teachers"—or "cost too much"—or "are too one sided"—or "encroach upon medical prerogatives"—or "require too much pupil time," and so on indefinitely—all erroneous—as any interested executive officer will quickly learn by a visit, say, to the supervisors of physical education at Yonkers, or at Scarsdale, near New York City, or at

¹In his first article, Dr. Rogers reviewed evidence which demonstrates the past failure of physical education to perform its most basic functions. In his second, he outlined programs which have proved notably successful, particularly on the eastern seaboard.

Syracuse University, or who will inquire of Professor James A. Wylie at Boston University, or of State Chief of Physical Education, Ellis Champlin, at the State Education Department, Albany, N. Y., or of Kenneth DuBois in the Albany city schools.

Existing conditions render it imperative that administrators proceed deliberately as well as firmly in reversing the continuing trend toward irresponsible "free play" and "recreation" in the conduct of physical education. We shall list 16 steps.

B

The first four steps are for the superintendent to inform himself thoroughly concerning the program he will espouse. It is recommended that he (1) "read up" on PFI Programs; (2) visit two or more of the schools where PFI Programs are "operating"; (3) call upon their strongest depreciators for criticisms; then (4) return to PFI people for their answers to such criticisms.²

²"PFI Programs" are briefly explained in following publications as well as in the previous issue of the SCHOOL BOARD JOURNAL: (1) "School and Society" for October 28, 1939; (2) "The Journal of Health, Physical Education and Recreation," January 1, 1939, (3) Several articles in the March, 1935, "Supplement" to the "Research Quarterly" of the American Association for H. P. E. and R. (4) Several articles in both the April and December, 1940, issues of "Education," (5) several sections of the New York State Physical Education Syllabus for grades seven to twelve, 1934.

This study will be illuminating as well as stimulating; it is worthy of a week of any superintendent's time, particularly because health is a basic aim of education, and physical fitness a prime bulwark of national safety and progress. Such a foray will prepare him to perform effectively as a supervisory officer over his physical education department. Moreover, the necessary insight and technical information for such supervision may quickly be obtained.

Thus equipped the superintendent is ready for step five, which is to secure school board understanding and formal approval of physical fitness and proper physical fitness tests as a "basic aim and measure of success in physical education." Thus, at least one, and better two, special board meetings to discuss this subject should be held. Nor is this too much to ask of any board; for "physical growth and development" is one of the three important general aims of all education, and today it is less successfully followed than any other. Once "gotten into," the board will be literally fascinated by the opportunities which open up.

Whether the local supervisor of physical education should attend the meetings depends on whether he is already willing to follow, say, the Syracuse University, or New York State, or Brookline, Mass., program. If not, he should not be informed especially of the board meetings until

formal action has been taken. (Remember, we are here discussing necessary steps for successful action, not "the theory of democratic procedure in public education." Moreover, even "in theory" teachers and supervisors have no place in board meetings, except to "report" upon recommendation of the superintendent. It is the board's paramount prerogative to "determine policy"—chiefly aims and objectives. Action in this field, then, should be taken by the board.

From these board meetings should come a clear understanding by all concerned of all foreseeable eventualities; and formal action, such as

"Resolved, that the superintendent of schools take all necessary actions to establish physical education as a bona fide physical-fitness-developing school service. Resolved, further, that the board will, annually or oftener, scrutinize objective test-records of the status of pupils' physical fitness, and their changes therein, as primary evidence of the success of this branch in serving the community. Resolved, further, that these policies are not experimental or provisional, but fundamental and permanent."

Armed with such support, executive officers are equipped to convince all persons concerned that it is not only right but also safe to act independently of outside pressures and to require their subordinates to conform to the local program.

C

Having secured board approval, as his sixth step, the superintendent will naturally inform his chief local physical education supervisor. But a correlative seventh step may well be to inform neighboring superintendents of his progress, with a view to their cooperative action.

D

The eighth step is most difficult: to retrain the local physical education staff in the aims of physical education, and specifically in the primacy and implications of the health aim—particularly for themselves. It is "Difficult" because most pedagogues are today unaccustomed to act forthrightly in terms of aims. And it is particularly difficult for physical educators, for two reasons: First, because their minds have been confused in teacher-training schools. Second, because in their daily work many of them have learned to talk morality while teaching the reverse—for example, in the conduct of sports.

This job of retraining teachers in aims well under way, the ninth step may be begun: to train local supervisors and teachers in techniques of testing, interpretation of results, and follow-up procedures. Here administrators will be on familiar ground, for most of them have been through similar experiences in the fields of reading, arithmetic, and other special branches now using diagnostic tests.

For example, physical directors, generally (as did academic teachers a generation ago) have little appreciation of the need for precision in testing, or even for the meticulous use of standard testing techniques. Properly to interpret results of, say, PFI tests, requires considerable training and experience. Moreover, the constant advice and aid of school nursing and medical staffs are necessary for best results. ("PFI Programs" bring these three sometimes-antagonistic groups closer than any other experiences possibly can.)

Consequently, at least a school term of supervised practice in testing and use of records is necessary to prepare teachers for the new program; or they may be sent to summer-schools where such techniques are properly taught.

We advise training-in-service. Large cities may arrange for extension courses for their own staffs. Smaller cities may combine, sending their staffs to centrally located courses, two hours a night twice a week for a semester. These training courses should include, from the beginning, practice in testing volunteer pupils.

E

During the training period for physical directors and their staffs, school principals and their faculties should be thoroughly informed of the new developments; for their cooperation is necessary to the full use of any redirected program which aims at rendering pupils most fit physically for study, work, play, social service.

At least three faculty meetings should be conducted. In the first, the general aim of the new departures should be explained, tests should be described, results expected should be outlined, and teachers should be urged to take the tests themselves. (Many will.)

At the second faculty meeting, the local physical directors should discuss individual test records of pupils already tested. These will be fascinating to academic teachers; for even if tests have not been accurately given, results will be revelatory. Academic teachers should be encouraged to suggest reasons for pupils' unusually low or high scores, to comment on proposed remedial programs, and to add their own proposals.

In the third faculty meeting, the principal should announce definite plans for the subsequent semester physical education program. These may include curtailing the academic courses of low-fitness pupils; curtailing the physical-activity classes of high-fitness pupils; the formation of a physical-fitness council, including representatives of nurses, home-economics departments, academic departments, etc.; the addition of some physical-fitness record to report cards; and others.

Another teachers meeting, if possible, should concentrate on the interpretation of physical-fitness scores, particularly in relation to medical records, to IQ's and, if possible, somatotypes.

F

The thirteenth step is to standardize testing techniques throughout the city, so that various averages in different schools may be compared with propriety. If PFI tests are used, a high degree of objectivity may be achieved, for the reliability coefficient of the PFI, in competent hands, is above .97, while its objectivity coefficient is even higher—chiefly because precision-instruments are used, and testing techniques standardized from the experiences of over 2,000,000 tests since 1925, when the PFI was first developed. Standardization can be achieved by bringing all testers together in "practice seminars," in which approved techniques are demonstrated, discussed, practiced, rechecked.³

G

The fourteenth to sixteenth—and final "preliminary"—steps are to establish school programs, to test pupils for assignment to classes adapted to their individual needs—and then so to assign them. Some directors prefer to do this in May for the following school year. Others make it the first fall activity, following annual medical inspections. Retesting should be done monthly for those pupils lowest in physical fitness, semiannually for others.

Ideally, the 15 to 20 per cent of students in grades 7 to 16 should be scheduled for daily periods of physical rest or activity, during which teachers should instruct and supervise them closely. The 40 to 60 per cent in the middle range should attend classes from two to three periods weekly. The remainder, in senior high school and college, should not be "scheduled" for any school-day physical activity classes, but be encouraged to choose their own time for, and place of, activity, under general teacher supervision and review.

School superintendents and principals fearing that these provisions will fail to meet state laws should be reassured: no state official will disapprove of assigning high-physical-fitness pupils to "supervised afterschool activity," particularly if low-fitness pupils are given daily attention.

But observe: this procedure *reverses* the present practice, which is to excuse unhealthy pupils, while overdeveloping those most fit physically—in required as well as voluntary sports!

Thus, again, and this time from the vantage of definite advice concerning actual programs now followed in a very few highly favored schools, the problem presents itself: Must pupils in the reader's schools miss wholly rational physical-education services, and continue to follow almost wholly irrational conventions—particularly when the ideal program need cost but little more than the irrational?

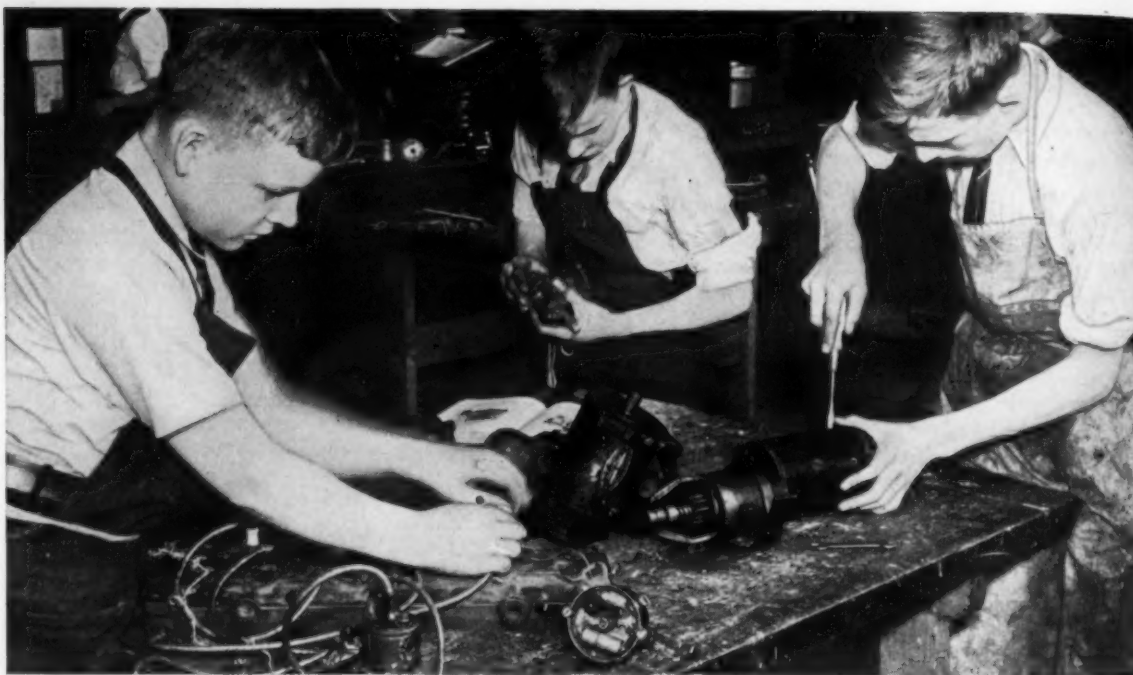
(Concluded on page 78)

³In Brookline, in 1940, the entire physical education staff met weekly for six weeks to re-establish standards after having given PFI tests for five years.

WAR BABIES

Noel T. Myers¹

Industrial arts instruction has vocational and cultural values at the high-school level.



We are assured of some things in war-time. Definite trends and social weakness are brought into focus of the public eye. Certain trends will be noted temporarily and some social weakness will be corrected during the emergency. These conditions are often labeled "war babies."

Education is not without war babies. War furnishes the incentive and demand for certain teaching techniques and pre-induction courses, often resulting in rigid regimentation, which cannot become a permanent part of education for a democracy. However, the emphasis on certain phases of education content will change and will remain changed for another decade.

Instead of developing new techniques in correcting inefficient methods of approach, we are in some danger of futile duplication. Physical fitness, for example, has been brought so abruptly to our attention that we may plunge into a program, out of sheer enthusiasm, without destination or point of departure. We have taught "health" for some time in our schools—we consider "working" our students every day in "gym." We may be closing our eyes to the obvious fact that many of our young people fail physically and mentally due to lack of proper nutrition and rest. Logically, we would combine health and physical fitness, with information concerning the individual, into a well-rounded program that would in turn provide for co-ordination of physical and mental health. We should be concerned about the child's body from kindergarten on up through the grades. It would seem to be a matter of "too little and too late" to suddenly discover child-body needs upon entry into junior or senior high school.

We are likely to diverge upon tangents in the social studies. Perhaps geography and history content could well be com-

bined into one course offering. This procedure could be much more interesting and informative to the child. Thus we could be relieved in part of cut-and-dried courses segregated from the world by four walls and dominating all available school time.

The Industrial Arts in High School

There has been an "open season" on the practical arts for so long that critics are prone to attach the stigma of war baby to recent achievement and demand in this prominent field of education. We, in industrial arts (a division of the practical arts) know that since the inception of industrial arts in 1910, our work has had steady and realistic growth. We know that our philosophy has been formulated in part by such educational pioneers as Pestalozzi and Fellenberg. No, the phases of industrial education are neither "new fangled frills" nor war babies. If we are to agree in any way with our contemporary philosophers, and accept experience as learning, we must permit industrial education to assume its rightful portion of the educational load.

Industrial education has long carried the banner of general education objectives and provides means for attaining the social-economic goals of America. We have offered the media of course integration and have provided the exploratory experience areas so necessary to guidance in the junior high school.

Inertia of Traditional Standards

School administration, in general, has been, and is, reluctant to make changes from the *status quo* and the traditional standards. Some of us recall that this type of lethargy resulted in the NYA. Governmental agencies, poised to take over logical school services, are still a triple threat. If we fail in this type of educational endeavor, the agencies move in.

Due to a timid requirement in most states, industrial arts have been confined to ill-lighted, ill-heated, and ill-ventilated basement rooms. Classes have been held to a minimum of two or three periods per week. Girls have been excluded, although boys and girls sit side by side in other classrooms. Rating in achievement has not been honored on par with other course offerings. The "shop" has been considered a "dumping ground" for the physically and mentally handicapped. Education that can grow above these conditions has unquestionable merit.

Some alarm is expressed that industrial arts may become top-heavy in the total junior-high-school program. It does not appear plausible that courses embodying and integrating the fundamentals of the three R's could become overbalanced. Industrial arts makes possible functional application of mathematics, languages, and science. It does not foster the memorization of factual material which is returned to the teacher and then forgotten.

Cultural values of industrial arts are still criticized by those in the teaching profession who cling to the belief that culture must be screened from the moldering graves of Socrates and Shakespeare. The culture of any age is based upon the daily accomplishment of the people. We live in an industrial democracy; we are undergoing continual social change and yet know so little about it. Artist's brushes may record it in part, but the hands of our industrial workers create it.

Drastic educational reorganization has been in effect since Pearl Harbor. Reorganization will continue even through a post-war period. As professional people, teachers should see that the schools, at least, catch up with social demand and trend. There can be no "back to normal" in the

(Concluded on page 78)

¹Director of Industrial Education, New Castle, Pa.

A Half Century of State School-Board Associations

Calvin Grieder¹ and Stephen A. Romine²

PART II. PURPOSES, ACTIVITIES, AND ACHIEVEMENTS

(In the first part of this article last month, the writers presented data on date of founding, membership, and income of state school-board associations.)

The 33 state school-board associations, listed in the first part of this article last month, are gratifying evidence of the growing interest among laymen in public education. The nature of this interest and the effectiveness with which it is pursued are best revealed through a study of the purposes, activities, and accomplishments of the associations.

The Over-all Goal: Better Schools

Stated in the constitutions of these organizations are the purposes and objectives for which they stand. Though the number of such expressions varies and the specific wording differs, the general tenor and spirit are the same. A survey reveals that in each constitution there is stated, or implied through other stated objectives, the general purpose of improving public education. Many subordinate objectives are given, most of which may be classified under these five heads:

- Cooperation with other lay and professional groups
- Promotion of favorable school legislation
- Study of educational problems
- Development of more efficient boards of education
- Provision of an agency for mutual help and for the gathering and dissemination of information

As an example of the better statements of objectives found in the constitutions, the following excerpt is taken from the constitution of the California School-Trustees Association:

The object and purpose of this Association shall be to preserve, advance, and improve the public free schools; to encourage and cooperate with all persons and associations whose interests and purposes shall be the betterment of the educational opportunities of the children of California; to promote the enactment of such legislation as shall tend toward the improvement of educational programs; to promote and advance public education through research and investigation and to publish reports on educational problems; to obtain the foregoing objectives, so far as it is reasonably possible, within the limits of a just and fair tax upon the citizens of California.

These purposes indicate that school-board associations are attacking their problems from two important angles: (1) by doing all they can within the present provisions of school law, and (2) by promoting the enactment of better school laws.

Wide Variety of Problems Studied

All associations hold annual conventions, although during the war attendance has been curtailed. Regional meetings within states are conducted by 14 associations, the number of centers ranging from three per state to as many as one per county. Some associations hold their conventions and meetings in conjunction with those of state education associations or with conferences of school administrators. Other associations meet by themselves. Both plans seem to be satisfactory. Partly joint meetings are favored by some groups, and in some states much that has been accomplished is the result of joint action.

The nature of convention programs varies and a multitude of topics are usually considered. Participants in programs include local, state, and national figures, and are drawn from all walks of life. Lectures, reports, panels and group discussions, written

proceedings, and other methods of disseminating information and deliberating on problems are used. Representatives of the types of topics considered in the past few years are the following 10 areas:

- Schools and the War: Now and After
- Administration, Personnel, and Finance
- Legislation and Taxation
- Transportation
- Youth Problems, Health, and Delinquency
- School Lunches and Rationing
- Textbooks and Instructional Problems
- School Buildings
- District Reorganization
- Board Procedures and Practices

As these subjects indicate, school boards are not merely interested in those problems which immediately face the legal administrative authorities of school districts. They are very definitely interested in the problems facing school superintendents, principals, teachers, parents, and children. Through a better understanding of the function of the school in a democratic social order and the problems involved in the school's operation, they will not only render better service as board members, but will also enable other school personnel to function better. This does not mean that school boards are desirous of taking over the technical administration of education. No evidence was found in this inquiry that any association is seeking to assume control over education in all its phases.

On the contrary, school-board associations cooperate with many other groups, both educational and noneducational. The extent of cooperation varies from informal alliance to organized co-ordination. An example of the latter is the Continuing Educational Council of Florida, which consists of representatives of 17 different lay, labor, professional, and service organizations or groups, and includes both men and women. The Florida School-Board Association is represented in the Council. Such problems as state aid for schools, teacher welfare, juvenile delinquency, and others are studied by the Council. It has solicited and received from gubernatorial candidates statements on their educational policies.

The Illinois association sponsors and finances a Public School Study Commission made up of board members, county superintendents, school administrators, and college and university educators. This group studies problems common to schools such as those listed above for conventions.

Influence on educational legislation is exerted through individual contacts, legislative committees, and a variety of publications. Associations act both independently and jointly with other state educational groups in this respect. Concerted effort, large representation, and attack from several angles probably are the requirements for success.

In 1941 a loose organization called the National Council of State School-Board Associations was formed. Its five aims were:

- To equalize educational opportunity in various states
- To study the problem of youth unemployment
- To co-ordinate activities of educational groups
- To equalize the burden of school support
- To stimulate formation of state associations of school-board members

Only two meetings of the Council were held, of which the second, in February, 1942, in conjunction with the San Francisco convention of the American Association of School Administrators, was notably successful. The war prevented further

¹Associate Professor of School Administration, University of Colorado, and Secretary-Treasurer of the Colorado Association of School Boards.

²Graduate student in school administration, University of Colorado.

growth. At this writing steps are being taken to revive the National Council in 1945.

Nine Periodicals Published

Nine associations publish periodicals which appear from four to six times annually. Circulation of these publications ranges from less than 1000 copies to more than 11,000. Major topics most generally included may be grouped under eight heads:

- School laws and legislation
- Administration, finance, insurance, taxation, etc.
- Personnel problems, salaries, tenure, retirement
- Schools and the war: now and after
- Instructional programs and activities
- State and federal aid
- School-board duties, policies, and procedures
- Miscellaneous articles of educational interest

Illustrative of the immediate and general utility of some articles is one appearing in a recent issue of the *Illinois School Board Journal* entitled, "A Calendar of Statutory Duties of Illinois School Boards." A regular feature of the *Colorado School Board Bulletin* is a section devoted to "Questions and Answers on Colorado School Law." A new quarterly publication, *Wisconsin School Board News* was launched in September, 1944.

Other publications, such as news letters, special bulletins, handbooks, and so forth, are published by 18 associations, ten of which do not publish a regular paper. Typical of the special bulletins are *An Insurance Program*, issued by the New York association; *School Code Digest and Code of Ethics* by California; and a *Handbook for Minnesota School Board Members*. Of another type is the mimeographed *Report on Juvenile Delinquency Survey*, which was issued by the Connecticut Association of Boards of Education to stimulate state-wide study of the problem. The latest thing in the line of publications is The School Board Reference Library, which has been undertaken by the Illinois association. About 20 titles are planned for the entire series, dealing with finance, curriculum, school plant, and other aspects of education.

Many Substantial Accomplishments

To grow in membership, to hold conventions, to study problems, make resolutions, issue publications, enter into cooperative endeavor — these and many other activities are no mean accomplishments. Beyond achieving these immediate objectives, collectively they are a means to the accomplishment of the central purpose, the improvement of public education.

To evaluate the accomplishments of the school-board associations is most difficult. On the basis of replies to the writers' inquiry, the following summary is submitted.

Numerous definite achievements were reported, which may be classified under seven rubrics:

- Better school legislation
- Increased state aid
- Reorganization of administrative units
- Increased salaries for teachers and retirement provisions

- Increased efficiency and effectiveness of board members
- Better accounting and insurance programs
- Longer school terms or more years of schooling

In New Jersey the Federation of District Boards was influential in having 98 per cent of favorable school legislation passed and a large per cent of unfavorable proposals defeated in recent legislatures. The Idaho association, youngest of the state school-board organizations, reports activity resulting in increased teachers' salaries and reorganization of administrative units. The Colorado association was instrumental in getting a 25 per cent rate reduction on insurance covering school buildings throughout the state in 1941. The North Carolina association was the prime factor in effecting a rather complete overhauling of the educational system. The school term was increased from 8 to 9 months for every child, and the twelfth grade was added to the former 11-grade program. State aid was increased by several million dollars per year, a teacher tenure law and a retirement system were enacted, and other important objectives were attained.

Lack of space prevents the mention of many other notable accomplishments. A quotation from the report of the Louisiana association expresses well the general tone of accomplishments:

... the major accomplishments of our organization have been the development of our individual school board members, the enactment of proper school legislation, the increase of financial support for our schools, and the bringing about of a spirit of harmony, between our educational organizations.

Conclusions

The purposes served by school-board associations are admirable, and the progress which has been made in realizing these purposes is promising. The associations are assisting in satisfying the ever present need for a large, well-informed, and interested lay group capable of sustaining an effective liaison between school and society.

With the close of the war the schools may face demands for retrenchment, and the need for more understanding, cooperation, and support will be even greater and the task of achieving them even more difficult. In the battle for the tax dollar, the problems of state and federal aid and control, and the clamor for this or that type of educational program, professional educators will need wise counsel and more stability and support than they can muster within their own ranks. School boards and their associations should be in a position to render a valuable service to the schools and to democracy.

They must not become the tools of the minorities which, consciously or otherwise oppose public education. Nor should they allow their growing interest in and understanding of school problems, policies, and practices to lead them into the error of invading the realm of the professional educators to whom they should delegate professional and executive authority. The future welfare of American schools, of American youth, and ultimately of the nation rests largely with school boards as agents of the states. Every encouragement should be given to the state school-board associations in the furtherance of their common cause.

SCHOOL POLICIES

A philosophy, or a system of policies, serves as a guide to chart the way and to give point, direction, and pattern to any program. It is obvious that in such a broad field as education, certain clearly defined policies are needed if the individual and society are to get the most possible good from the programs of education sponsored by the public school systems. This clearly defined system of policies must be modified from time to time so that the school and society may more effectively contribute to its common goals.

Many individuals play a part in shaping a system of policies for the schools. The administration has the responsibility of stating this composite philosophy of the school's aims and ends so that it may effectively serve as the guide for which it is intended. — L. A. Steger, Ames, Iowa.

POSTWAR SCHOOL CONSTRUCTION

New school construction costing more than \$1,000,000,000 has been earmarked for the early postwar period according to Dr. N. L. Engelhardt, president of the American Association of School Administrators.

Replies received from a questionnaire sent to 806 communities have revealed that 4846 major school structures will be erected. These include 2600 additions or major alterations to existing buildings, with new elementary school accommodations presenting the greatest need. Sites have already been selected for 1300 of these new projects and architects have been designated for 1100.

A majority of the cities reporting indicated that a federal grant of at least 50 per cent of the cost is expected to help them carry out their plans.

BUSINESS AND EDUCATION

The challenge I lay down for education is that the upgrading, the training, the education of the skills of the American working force, be developed as an instrument whereby America — these United States — may meet the postwar challenge of optimum employment and adequate production. We can thus make of this a successful people in the coming days of peace.

The challenge I accept for business is that if education can and will demonstrate its willingness and ability so to train our youth and adults to become skilled producers of goods and services, earning therefor wages and salaries that will enable them to consume these products, business will meet the cost of the further necessary perfection of the instrument of education to this end. — Thomas C. Boushall.

The Continuance and Maintenance of a Rural School Program of Supervision

Ruth Power Logan¹

To initiate and to organize a rural school program of supervision is both interesting and inspiring, but the real challenge lies in continuing and maintaining that program. To formulate plans is comparatively simple; to execute those same plans requires patience, perseverance, judgment, a sense of humor.

The first year is necessarily an acquaintance period. Introductions to many things are made, planning is general in nature, the mold of the future is set. To speak of introducing many things is not to advocate a scattered un-co-ordinated program of activities having no definite purpose but rather to set an educational stage with many scenes, some one of which the individual teacher may find suited to her talents and wherein she may play a desirable and happy role. To advise that planning be general is not to encourage a too large scope of undertakings leading only to futility, but rather to paint a picture of possibilities enlisting teacher interest and participation. Frequently, the personnel of rural isolated areas has had no opportunity to view the educational scene in its larger aspects. Teacher potentialities are often circumscribed by lack of leadership. To set the mold of the future is to establish a spirit of cooperative endeavor that will withstand the cross currents of impeding incidents; those local happenings that obstruct progress.

Long-Term Policies Necessary

The most successful supervision is predicated upon a long-term policy. The maintenance program employing the general and indirect approach may seem to accomplish less, but it will be found in time that greater growth has resulted. The direct method with specific direction is too often short lived for through it teachers develop little or no understanding of principles involved. No personal responsibility is felt or assumed, no vision is experienced.

It is essential that democratic and creative concepts of supervision be followed by the supervisor herself. She more than anyone else must constantly guard her own attitudes and actions. Her paramount duty is to enrich her own personality and broaden her own educational knowledge as

she seeks to encourage the growth of teachers.

Adopting the state motto of New Mexico, "We Grow as We Go" for a guiding principle we launched forth upon an effort to improve the schools of Sandoval County. The program has met vicissitudes, yet it lives largely because of the loyalty of the teaching staff.

In the beginning, it was evident that the prevalent attitude not only expected but also accepted the idea of a controlled, imposed, uniform procedure. To develop and maintain a flexible, dynamic program of supervision adequate for the growth of teachers as well as pupils became the prime objective.

At first, teachers were puzzled at finding themselves cited to sources of information for the answers to their questions instead of being given the anticipated ready-made solution. Even more unexpected were the problems set to stimulate curiosity. Situations in which teachers would have to learn were deliberately created until many became aware of the fact that school teaching was something more than just keeping school. This led to new avenues of thought. A vista of better educational practice came to be the common experience.

In a county with an area three times the size of the state of Rhode Island, nearly half as large as Delaware; where most schools are from 25 to 85 miles from the office; where the telephones are few and mail is received in some places but once or twice a week, it becomes necessary to develop a special system of supervision.

Zone Meetings of Teachers

Dividing the county into zones solves the twin problem of communication and transportation. Moreover, the zone organization has distinct, definite, and important values beyond mere mechanical features. It is the most functional device for the maintenance program; providing opportunity for distribution of materials, exchange of books, discussion of classroom methods and school legislative programs. One of the most fortunate aspects lies in the opportunity to limit and to equalize the number of teachers within a working unit, effecting an efficiency not characteristic of large groups; which fail to secure adequate participation. If only four teachers in each zone contribute, that is a total of 16; whereas, the larger meeting gets the voice of only the four.

There is little of intrinsic value to be gained in the usual county-wide general

teachers meeting. Having a couple of speakers and singing a few songs seldom carries over into the classroom. If real educational progress is to be achieved, general objectives for the year must be introduced in specific procedures; an overview of teaching possibilities must be presented, and above all these recommendations must be followed up. Later small zone meetings serve well in the necessity for clarification and emphasis as well as in provision for the introduction of materials that take more time for examination and explanation than is available in the larger meeting.

The first zone meetings are held within three weeks at the centers where zone libraries are located so that assistance may be given in choice of books. Later zone meetings are held in different schools for greater effectiveness. Visiting increases teacher enthusiasm; school-hostess preparation is beneficial to teacher and pupil alike, and the interest created in the community is even more significant. All-day bimonthly meetings held on Friday and Monday of two successive weeks have been found the best solution for covering the county adequately in group conferences. The meetings for the isolated and scattered school areas are more successful if held on Friday, town centers taking Monday. No factor in a maintenance program of supervision is too small to merit consideration.

Variety in Meeting Programs

The programs are varied, at times concerned with school legislation, more often with demonstrations of teaching techniques, still more frequently with discussion of classroom problems. Sometimes these programs are planned in the light of the needs of the majority as observed in classroom visits, sometimes following suggestions or requests of teachers, sometimes presenting subjects originating from sources outside the county system, sometimes utilizing suitable materials and teaching procedures found in local classrooms or elsewhere.

Programs in a series of zone meetings are not always the same, although certain aspects are repeated for each group. Most of the program, often taking the form of demonstrations of teaching techniques, is presented by the teachers themselves. Any demonstration or recommendation of the zone meeting must in turn have its follow-up in the form of classroom visits and either school group or individual teacher conferences.

Sometimes demonstrations seem to be

¹Rural Supervisor, Sandoval County, N. Mex.

Note. In a previous paper, published in the *Journal* for August, 1943, the author discussed the problem of initiating a rural school program of supervision. In this paper she shows how she has successfully maintained efficiency in teaching by a successful maintenance and upgrading program. — *Editor.*

regarded as a mere show, a play put on for entertainment, teachers failing to realize that professional workers follow such procedures every day. Unique method and dramatic approach seldom fail to appeal and impress. One case may be cited in which two equally capable teachers were asked to demonstrate in the same session a second-grade reading lesson, the one according to modern concepts of meaningful teaching, the other as reading is too often taught with no purpose and no thought. The presentation was graphic, resulting in chuckles from better qualified teachers. Less capable teachers are often more enlightened by informed co-worker comment provoked by unusual means than by conventional procedures.

At least once a year representatives of outside agencies such as the Soil Conservation Service or the State Health Department are invited to outline and initiate a special teaching program. The classroom development following their suggestions is later presented by local teachers. Sandoval County teachers have been appreciative of the least help offered and ever ready to contribute to any scheme of improvement to the best of their ability. Thus it came about that a sort of professional graduation system developed wherein teachers most successful in presenting demonstrations in the small zone group meeting repeated for the larger county-wide general meeting. From this experience many went on to contribute to state district programs and some finally to the state convention itself.

Committee Projects

Committee studies are a most difficult type of work to carry on in an area of excessive mileage. A more functional procedure encourages individual initiative in research, or assigns a topic for a report. This résumé of reading and study presented to the zone groups form a basis for discussion. Teachers from personal knowledge and experience add to or subtract from the original until a program has been developed for future use. Another procedure used successfully depends upon the supervisor carrying a project from school to school on her regular visits, using after-school conferences to evaluate the material. Report cards were revised in this manner, each of several teacher groups contributing to the final decision and adoption.

During legislative years, one zone meeting is devoted to the discussion of proposed laws, ending in sending the composite opinion to the proper people. At other times such things as school attendance have been discussed and action taken as a teacher group to improve conditions. As a result certain per cents of attendance for promotions and graduation were established. Eighth-grade diplomas were eliminated as a step in emphasizing the importance and desirability of attending high school.

Everything pertaining to the classroom instruction and related subjects passes through the channel of the zone meeting sooner or later. As one teacher said, "I've missed only one zone meeting in four years, and I never want to miss another for I was lost for weeks." Incidentally, this teacher once walked five miles through knee-deep snow to avoid missing a meeting. Others in mountain areas have ridden long distances horseback through the mud.

Classroom supplies have been a topic for discussion, and purchases have been in accordance with results of a questionnaire sent to each teacher when the materials list was revised on a per-teacher per-pupil basis. This was an educative device for teachers who had never before evaluated materials, nor studied costs. They learned to use tagboard for permanent charts only and less expensive wrapping paper for temporary purposes. After a supervisor requirement that all pencil sharpeners, coal buckets, and wastebaskets be turned into the zone center for summer storage, along with books, these things have not been reported lost so much. Packing supplies for distribution at the opening of the school year has proved a satisfactory solution for the problems of lack of space, distance difficulty in obtaining materials, and teacher complaint over both true and fancied discrimination.

Knowing that many teachers have never realized the "pulling power" of an attractive school, nor thought of a classroom in terms of a "school home" or applied art, that subject was taken up in zone meetings and by both bulletin and personal suggestions. A scrapbook of pictures of attractive classrooms is useful in acquainting teachers with possibilities. A simple two-column report under headings "County Help — Self Help" is an effective means for securing stimulation of action and for rewarding teacher effort. Teachers are just as responsive to attractive appearances as children. Bulletins with colored covers were found to have greater appeal, and those with front-cover pictures were well remembered.

In-Service Training Devices

A number of in-service training devices besides the zone meetings have been used. Sometimes these have been subtle and indirect. The report card may be cited as an example, for besides recording children's growth and progress it has the further objective of improving the teacher by keeping before her the real aims of the school.

Curriculum revision demanded early consideration and has rightly continued to be one of the chief concerns of the continuance and maintenance program. Observation of procedures used in the classroom clearly indicated certain phases of instruction that must receive immediate attention. Children could not read with understanding. Little provision had been made for the beginner faced with the twofold

problem of learning a new language and adjusting himself to school. Many teachers were cognizant of these and other conditions but more or less powerless to improve the situation without guidance and proper instructional materials.

Finances were definitely limited, but small mimeographed booklets of pictures to stimulate the development of a speaking vocabulary were issued to each beginner. A remedial measure was taken when preprimers were purchased from the county library budget for the purpose of providing easier reading material for the first graders. Readers were stepped up one reading level throughout the entire eight grades, thus providing more suitable material for the average child. Although each was expected to read at least one book of his grade level before promotion, no inflexible rule was set lest the superior child be penalized.

Reading readiness books later replaced the mimeographed booklets, and many other supplementary materials for the other grades were purchased on a planned basis over a period of years. A revised law governing state textbook distribution for which teachers as well as administrators worked has been a material aid not only in giving each county unit an opportunity to secure its greatest needs but also in providing training for the teaching staff in the evaluation of books. Teacher committee personnel is changed in part each year in order to spread this type of training.

Improving the Teaching of Reading

Because reading had been so poorly taught, showing a lack of knowledge of the skills involved, the supervisor found it expedient as a timesaver to issue a few bulletins of condensations from various professional books designed to give the teachers a guide book of objectives and procedures in digest form. These were distributed and discussed in teachers' meetings, and followed up with demonstrations. The application of these recommended techniques was checked through practice lessons taught under observation of the supervisor and through small group conference discussions. Assistance was likewise extended to teachers in the adoption of other programs to their respective communities so that the environment was capitalized in teaching procedures.

Giving diagnostic tests is an effective procedure, for through the demands of the test teachers are able to see more clearly the inadequacies in their teaching.

The visiting day is a valuable means of helping teachers improve their techniques if the number for a trip is limited to three or four with similar work and the supervisor accompanies them, observations being much more significant when a trained person interprets procedures as they are enacted.

A laboratory school preceding the fall term is more practical than the Saturday

(Concluded on page 76)

Peru Improves Its Arithmetic Instruction

Cecil W. Martin¹

In the fall of 1943 a thorough testing program was administered in the Peru public schools, and certain strengths and certain weaknesses were brought to light when the tests results were analyzed. The study of test results was made the subject of a series of general teachers' meetings and group meetings. Three general problems grew out of these meetings:

A. What arithmetic shall be taught in grades one and two in the Peru Public Schools?

B. What teaching technique can be instituted to make for better mastery and retention in spelling?

C. Shall history be extended downward in the grades and, if so, what shall be the form of the subject?

A voluntary committee made up of kindergarten, first- and second-grade teachers together with the superintendent of schools, under the chairmanship of Miss Margaret Mauritzen, second-grade teacher, sought to present an answer to Problem A. After a semester's intensive study a bulletin was prepared by the committee. Following the cooperative effort of writing, the various committee members criticized and revised the bulletin. "Arithmetic in the Primary Grades" was typed, double-space, with wide margins in order that criticisms might be written in. A stencil was cut and the mimeographed bulletin is in the hands of all primary teachers. Thorough revision in the light of classroom experience should make the bulletin valuable to our school system.

¹Superintendent of Schools, Peru, Ill.



Arithmetic has happy applications in a second grade where a number marking game is in progress.

The basic philosophy agreed upon by the committee is stated in the opening sentence of the bulletin. "Arithmetic should be taught in the primary grades for the same reason that reading is taught, namely, the child is ready

to learn, he has a real need of the subject, and the subject has value for him." This philosophy is implemented through suggested procedures that are intended to provide personal experience for the child which will build the needed imagery, the functional concepts, and the desired insight into number relationships.

Personal experience with children led the committee to the generalization that "long before most children enter school they have many mathematical concepts." Arithmetic is an actual part of daily living, even to a child of six. The problem of the teacher then becomes that of helping the child in perceiving quantitative relationships involved in his experience, in symbolizing these experiences in appropriate words, and in recognizing the printed symbols.

The program of arithmetic instruction as planned is one that utilizes the child's program of action involving his immediate surroundings. The teacher seeks to supply an environment enriched for learning in the area of arithmetic.

A long list of possible experiences, interesting to children, can be made from which the teacher can select things for pupils to do, supplementing the pupils' choices rather than displacing them.

Slow, unhurried experience with concrete

(Concluded on page 74)



Purchase of War Stamps and Bonds conducted by primary grades affords a very real use for numbers.

Some Principles and Problems in Determining a Salary Policy

Harold Spears

As was pointed out in the first part of this article, in the March JOURNAL, the tussle teachers have had with increased living costs and the mounting tax burden these past few years have sharpened their interest in and study of salary practices and policies. This article has represented an attempt to keynote for a salary study group some of the issues that must be resolved before a salary policy can emerge as a clear-cut and workable program.

The previous article discussed: (1) equal pay for equal work, (2) experience as a factor in salaries, (3) the question of merit, and (4) extra pay for extra service. The various ramifications of these related issues marks any one of them as a pitfall for the salary study group that tries to side-step the difficulties involved.

5. The Factor of Training

A large percentage of the schools that maintain a rigid salary schedule make a distinction in salary between the bachelor's and the master's degrees. For instance, five years of experience with the higher degree might call for a hundred dollars more than would five years' experience with the lower. Going back to the original point of equal pay for equal service, here again, just as in the typical recognition of experience, is an attempt to find a factor that by and large should provide a greater teaching contribution. The backers of this principle conceive that teachers should grow while in service, and since additional schooling implies growth, the schedule would hold out a financial incentive for it. Then, too, the additional salary would help to compensate for the costs of the advanced training.

On the other hand there are those who ridicule the suggestion that the advanced graduate work can be expected generally to result in greater teaching power. Would the person who takes this view be consistent if he were to turn around and endorse the principle of extra pay for extra experience? These two issues of experience and training are closely related, for in each case it is implied that additional growth is brought about, and thus additional service is rendered, and in turn additional pay is justified. A study group might well explain why it would endorse one and reject the other. Even though the master's degree in itself may not magically make the difference between poor and good teaching or between good and better teaching, the inclination to earn it indicates a professional interest that most schools want to recognize in a financial manner.

At times schools set up requirements of

summer school attendance every few years for each teacher on the staff, paying a bonus of a hundred dollars or so in such cases. If a school teacher has to look forward to a return to the campus for four or six hours' work every third summer, will such a requirement discourage the voluntary consecutive summer attendance that is needed for a master's degree?

6. Salary Differentials Based on Marital Status

A final issue that presents itself when salary policies are considered is the proposal to allow the married man or the married man with children a salary differential as distinguished from the single teacher. A related practice, and one not clearly distinguishable from this, is that of allowing the man teacher a salary differential above that of the woman teacher. Advocates of such practices seldom deny the acceptability of the principle of equal pay for equal service as a theory. They make their case on the ground that a school's competition with business, industry, and the other professions for the competent men needed to balance its staff demands a salary policy that will give it a chance to get these men. They point out that on the open market for teachers, a competent single teacher can be attracted at a lower figure than a competent married man. The economic factors which operate here are (1) the competition of other occupations for men, and (2) the living costs in the school district.

It is further pointed out that a teacher cannot make a maximum teaching contribution unless an adequate economic adjustment is made to the school community with respect to living, and that the average married man finds this adjustment more difficult than the average single teacher.

If the factor of supply and demand of competent men were not in the issue, then it might resolve itself merely into one of asking salary consideration for dependents. Then would arise the question of what constitutes dependency. If a salary policy professes to recognize dependency other than wife and children, it must set out exactly what constitutes dependency. The public schools of Rock Island, Ill., have such a system in operation.

To the single teacher who points out to the married man that she, too, has dependents, the married man can answer that in addition to his wife and children he is just as likely to have a father or a mother as a dependent as is the single teacher. He may even point out that through marriage he is even more vulnerable here, since a father-in-law or a

mother-in-law is a possible dependent. If the single teacher wants to reach far out for another point to substantiate her case for equal salary, she may point out to the married man that in his old age he may look to his children to support him, while she on the other hand needs to build up an adequate fund to support herself in her declining years.

Since the principle of differential between married and single teachers denies the happy thought of equal pay for equal service, and tends to set women against men in their judgments of fair salary procedures, this principle is not commonly advocated by educational leaders in the field of school administration, and is rarely set forth by school systems in their printed statements of salary policy. However, such differentials may be operating even though not openly admitted in stated policy. For instance, in 1943, the writer made a study of the salary policies in seven suburban township high schools just north or west of the city of Chicago, and found in all of them that a differential in salary between men and women was operating. The data for four of the schools, selected at random, are given below:

	Average Salary			
	School A	School B	School C	School D
All teachers	\$3,215	\$2,954	\$3,067	\$3,365
Men teachers	3,264	3,137	3,450	3,506
Women teachers	3,167	2,795	2,747	3,239

The distinction that exists in these schools may be due to many factors, but it can be assumed that over a period of years it has resulted largely from economic factors and not from a feeling that men deserve more than women, nor from any open denial of the theory of equal pay for equal service. In these four communities the cost of housing, either renting or owning a home, is as high or higher than in any community in the country. The writer, acting as administrator of one of these schools, found that \$1,900 seemed a fair beginning salary for a woman teacher just coming from college, but that it would neither attract a single man nor permit a married man to find a proper place to live in any of the communities. For the administration, the past year or two, to permit a married man teacher to enter this school for a salary less than \$2,700 would have been to perpetrate an act unprofessional from the standpoint of both teacher and pupil welfare. This statement stands regardless of the number of years of teaching experience of the candidate.

One administrator in that area explained the men-women differential by saying, "We have no stated differential between married men and single teachers, but in practice we do

find that married men are paid more than most women. Men cost more in a market such as we have at the present time, and in most instances men carry heavier extracurricular loads than women." A common method of paying homage to the principle of salary differentials for men, without endorsing it as a theory, is that of granting extra-salary allowances for extra-class duties such as coaching and helping at games. In most instances the men perform such services.

All such ramifications of the issue just treated will really test the ability of teachers to sit down and discuss calmly and professionally their problems. The earlier conviction of a teacher may often be tempered through an understanding of angles of the salary question never before called to her attention. For instance, two women teachers who were advocating a single-salary schedule with no differentials for family men were asked if they felt that the beginning salary of \$1,900 was fair enough for the young woman teacher coming into our school just out of college. They agreed. They were then shown that a young married man could not make a home in the community for a salary less than \$2,700. They appreciated the situation. They were then asked if the school should raise the salary of the young woman teacher to the level of the man's, just out of respect for the principle of equal pay for equal service. They shifted their thinking.

Salary Comparisons

A salary study group needs to be careful in making salary comparisons with other school districts. Living costs in the districts must be compared as well as the salaries paid. Furthermore, other hidden factors may mislead the unwary committee. One group of teachers, in making a case for higher salaries in their school, pointed out the higher average salary paid the faculty of a near-by high school in a community comparable from the standpoints of living costs and ability of the district to pay for schools. The comparison was put aside by the administration which went further in its study of the two situations and revealed that they were not at all comparable. The higher salary average in School B was due not to a higher scale of pay but to the fact that the faculty members there had had longer experience than the faculty of School A, and consequently more of the teachers were in the higher salary brackets. A careful comparison showed that 45 per cent of the faculty of School B had taught 25 or more years, as compared with 21 per cent of the faculty of School A in that category. The teachers of School B averaged 48 years of age, those of School A only 39. In fact, it turned out that the salary practice of School A was actually better than the policy in School B, even though the average salary in the latter was higher at the moment.

Another factor that may creep into comparisons is the inclusion of semiadministrative, and thus higher paid, positions. In the study of suburban schools just mentioned, it was

difficult to compare the school with 55 teachers with the one with 140. The larger the school, the more likely that the list of teachers' salaries will include semiadministrative positions.

Ability of the School District to Pay

Once all the issues involved in determining a satisfactory salary policy are resolved, there still remain certain important considerations. For instance, the group that recommends a new salary plan must know what this plan will cost the school district 5 years hence, 10 years hence, 15 years hence—not just what it will cost next year. Only then can the school board test the practicability of the policy. The study group can approximate these costs by working with such known factors as the usual turnover in teaching staff, the increment figures, the salary level of each teacher on the new plan, the approximate retirement dates of those of longer experience, the policy of the administration in replacing those who retire, etc. If the administration follows the policy of replacing the teacher who retires at \$3,600 with another \$3,600 teacher, this means something quite different to the study group than if the school follows the plan of taking financial advantage of a \$3,600 retirement by employing a younger teacher in the \$2,000 to \$2,500 salary range.

The "age" of a faculty means much in looking ahead to the school district's ability to pay teachers in the years to come. For instance, in the suburban school study referred to above, in School C 49 per cent of the teachers were in the age group having taught 25 years or over and the average teaching experience of these 54 teachers was 32 years. Thus we find a school with half of its teachers in the top salary bracket. In a few years all of these teachers will be retiring and dropping from the pay roll, enabling the school, if it takes advantage of the situation, to make replacements down in the lower salary levels with younger and less experienced teachers. This in turn could provide for greater salary increments in a revised policy, and it is conceivable that at the same time the total salary account might still continue to decline over a long period of years.

Compare this with the situation of School A. Only 21 per cent of this staff occupied this upper-age, upper-salary group, which means that fully four fifths of the staff are still on the way up. They still are to receive salary increments, which in turn means a constantly mounting salary account. Within the next ten years, School A stands to lose or retire only three of its top salaried people. While School C has only 19 per cent of its staff with as few as 14 years of teaching experience, School A has over half of its staff in that younger group. The salary account of School A will steadily increase for the next 15 years, without any additional adjustments for living costs, while School C's account promises to care for such adjustments and yet constantly decrease.

How much can a district pay for schools?



M. N. Todd
Superintendent of Schools
Lawrenceville, Illinois

Fifty years of service in the teaching profession is an enviable record. Very few persons reach that goal. Mr. M. N. Todd, superintendent of the schools of Lawrenceville, Ill., has attained such a record.

Beginning as a teacher in the rural schools of Lawrence County, Ind., at the age of 17, Mr. Todd gradually worked his way upward until he became principal of the village school at Lawrenceport, Ind.

In 1901 he went to the high school at Carlyle, Ill., as a teaching principal. After serving five years there, he was appointed superintendent of the city schools, where he completed 17 years of service.

During the next nine years he was principal of the Murphysboro Township High School. The last 18 years have been spent as principal of the Lawrenceville Township High School and superintendent of the elementary city schools. He has regularly attended summer school and has taught in summer school for 34 years.

Mr. Todd obtained a bachelor of science degree in normal school, was given a bachelor of arts degree by the University of Illinois, and a master of science degree by Northwestern University. He has completed further graduate work at Indiana University and at Columbia.

During his long period of service, Mr. Todd was responsible for the construction of three high schools at Murphysboro, two additions to elementary buildings in Lawrenceville, and an elaborate high school building.

How much will it pay? How much should it pay? One of the best available measures of ability to support education is the valuation of taxable property per pupil in average daily attendance. This is a factor that rightly should be considered when salary comparisons are made. Of course, estimated full valuation of property is not the factor that actually determines revenue. Assessed valuation is of prime importance, since the tax rate moves up as the valuation goes down. Montclair, N. J., supports schools on a par with the support given to schools in the suburban communities around Chicago. However, while Montclair places the assessed valuation of property at about 75 to 80 per cent of its actual value, the Deerfield-Shields Township School District of Illinois assesses at 12½ to 25 per cent of its actual value.

It may have been noticed that in this presentation the terms salary policy and salary plan were used more frequently than the term salary schedule. The latter denotes a more rigid system than do the others, and consequently calls for a more definite settlement

(Concluded on page 76)

Georgia's Teacher-Retirement System Begins Operation

Ernest R. Anderson*

January 1, 1945, marked the removal of that great hazard of life, a penniless old age, for teachers in the public schools and colleges of Georgia. The new retirement law wisely and justly provides for teachers who have already reached retirement age so that they may retire immediately with full benefits even though they will have made no contribution to the retirement fund.

History of the Plan

The retirement plan was originated and designed by the teachers themselves and not by politicians.

The first actual step toward providing a retirement plan was taken at the annual convention of the Georgia Education Association in April, 1942. A committee was appointed to work out and present a suitable plan, and the teachers were asked to contribute 50 cents each to finance the work of the committee. More than 8000 teachers cheerfully contributed \$4,593.15¹ to meet the expenses incident to the actuarial preparation of a retirement bill.

The committee employed an experienced actuary and immediately went about the preparation of the bill which was presented to the State Legislature in January, 1943, and approved on the first vote by a big majority.

It then developed that a constitutional amendment, permitting the levy of taxes for retirement purposes, was necessary before the new law could begin to function. This amendment was drawn up by the legislature and presented to the people in a special election on August 3, 1943. The amendment was ratified by a substantial majority of the voters.

Membership in the Fund

Any teacher in the state is eligible for membership who is not in the service of an employer operating a local retirement fund. The term "teacher" is used to mean any person employed not less than half time in the public day schools, or an employee of the State Board of Education employed in a teaching or supervisory capacity; or a bona-fide teacher or supervisor of teachers in any school operated by the State Department of Education; or any teacher or supervisor of teachers employed and paid by the Board of Regents of the University System of Georgia; or any nonclerical employee of the Agricultural Extension Service of the University of Georgia; or any school librarian, administrative official who supervises teachers, the registrar of each unit of the University System, and the secretary and treasurer of the Board of Regents.²

*Principal of the Fort Valley High School, Fort Valley, Ga.

¹L. E. Campbell, "Auditor's Report," *Georgia Education Journal*, Vol. 37, May, 1944, p. 21

Membership was made optional for teachers who were in service prior to January 1, 1944. Persons qualified for membership who are on leave in the armed forces of the United States will have six months after termination of their military service to apply for membership.

Any teacher not choosing to become a member before January, 1944, may become a member later, but he will not receive credit for any prior service.

All teachers who enter the state teaching service after January 1, 1944, are required to join the state retirement system as a condition of employment, unless they enter the service of a state-supported school having a local retirement system.³

Management of the System

The administration and responsibility for the proper operation of the retirement system and for making effective the provisions of the retirement act are vested in a board of trustees which consists of seven members as follows: the state auditor, ex-officio; the state insurance commissioner, ex-officio; the secretary of the Georgia Education Association, ex-officio; a school administrator or a principal; an employee of the Board of Regents of the University System of Georgia; a classroom teacher in the public schools; and a citizen of the state, not a member of the retirement system, and who is experienced in the investment of money.⁴

All members of the board of trustees are elected by the Assembly of the Georgia Education Association, except that member who is a citizen of the state, but not a member of the retirement system, and he is elected by the remaining six trustees. All trustees serve without compensation, but are reimbursed for necessary expenses which they incur through service on the board.

The board of trustees has complete charge of the operation of the retirement system, within the limitations of the Teacher Retirement Law, and are required to keep a record of all its proceedings, which are open to public inspection. The board has employed a full-time paid secretary with the necessary clerical help for the operation of the system, and is to publish annually a report showing the financial transactions of the retirement system for the preceding year, the amount of the accumulated cash and securities, and the last balance sheet showing the financial condition of the system by means of an actuarial valuation of the contingent assets and liabilities of the system. An actuarial valuation is required at least every five

²R. L. Ramsey, *Georgia Teacher Retirement Law*, Bulletin (Atlanta, Ga.: Georgia Education Association, 1943), pp. 5-6.

³*Georgia Teacher Retirement Law*, Sec. 3, Paragraph 1.

⁴*Ibid.*, Section 6, Paragraph 2.

years followed by the necessary financial adjustments.

To insure the safety of funds, the board of trustees is subjected to the same terms, conditions, limitations, and restrictions as are imposed by the state laws of Georgia upon domestic life-insurance companies in making and disposing of their investments.

The funds of the system may be kept in one or more banks or trust companies organized under the laws of Georgia or of the United States; provided that the sum on deposit in any one depository does not exceed 25 per cent of the paid up capital and surplus of that depository; and each bank must give a depository bond in an amount sufficient to cover the deposits of the retirement system.

Financing the Pensions

The system is financed jointly by the state, the local employer, and the teacher. The state and local employer together match the teacher's contributions, and each will contribute an additional amount monthly until the accrued liability due to prior credit is absorbed. In addition, the state pays⁵ all of the administration and overhead charges incident to the operation of the system, and has made an initial contribution of a million dollars to help make effective prior service certificates explained below.

Each member has a savings account in the system to which he is required to contribute 5 per cent of his salary. No contribution is required of any member on that part of his salary in excess of three million dollars per annum. Interest will be credited regularly to his savings account and upon retirement at age 60 his accumulated contributions will be used to provide an annuity.

The state and local employer will contribute an amount equal to the teacher's contribution to provide a pension equal to the annuity payable from the member's contributions. In case a teacher's salary is supplemented, the state contributes 5 per cent of the state salary and the local employer pays 5 per cent of the supplement.

It is evident that this method of providing a retirement allowance means that teachers who are now near retirement age will receive only a meager allowance upon retirement, but the state act wisely and justly provides a means whereby teachers who have reached age 60 may retire immediately with full benefits just as though they had contributed during their years of teaching.

In order to administer this provision of the law systematically and fairly, teachers now in service and who taught prior to July 1, 1943, were granted prior-service credit. The prior-service accumulation of a member is equal to the amount of the contributions he would have made plus an equal amount which the state and local employer would have contributed had the retirement system been in operation when he began teaching, together with regular interest thereon to July 1, 1943. The State has provided in cash a million dollars to make effective prior-service certificates. This

⁵Ramsey, *op. cit.*, p. 25.

certificate, in effect, credits the member's account with an amount equal to 5 per cent of his salary for the time he has been teaching to July 1, 1943, plus a matching amount from the state.

Benefit Provisions

Any member who has attained age 60 may retire on his own application regardless of the number of years of service. Retirement is compulsory at age 70, except that with the approval of his employer, he may remain in service until the end of the school year.

I. Disability Allowances

Any member who has completed 15 or more years of creditable service and who becomes permanently incapacitated mentally or physically for further performance of duty may be retired on a disability retirement allowance unless at the time of disability he has attained age sixty, in which case he will receive a service-retirement allowance. The disability allowance will be payable for the remainder of his life unless a medical examination shows him to be able to resume his work, in which case his disability allowance will be reduced or discontinued.

Upon disability retirement, the member receives the annuity which can be provided by his accumulated contributions with interest; and a pension of 75 per cent of the pension which he would have received had he remained in service to age 60 without any change in rate of compensation.

II. Death Benefits

If a member dies before retirement, all of his contributions are payable to his designated beneficiary or to his estate. In addition, three quarters of the interest credited thereon is paid if the member has at least 5 years of service, and the full interest is paid if the member has 15 or more years of service.

III. Withdrawal of Member

If a member leaves the school service for any reason other than death or retirement, his contributions with the same interest credits as are allowed at death are returned to him. Prior service contributions cannot be returned to the member since this amount is actually paid by the state and the local employer, and cannot be paid to the teacher except upon his retirement.

IV. Optional Benefit

If a member receives the regular retirement allowance, all payments are discontinued at death. A member may elect to take, instead of the regular allowance, a reduced allowance with the provision that, if he dies before receiving in payments the annuity provided from his own contributions, the balance of the amount equivalent to his accumulated contributions as they stood at retirement, will be paid to the person designated as his beneficiary or to his estate.

V. Retirement Allowance

Upon retirement each member receives an allowance composed of an annuity and a pension. His contributions at 5 per cent of his

TABLE I*. Approximate Percentages of Average Final Compensation Which Will Be Provided As Retirement Allowances

Beginning to contribute at			Beginning to contribute at		
age	Men	Women	age	Men	Women
20	54.30	49.68	40	23.28	20.80
21	52.80	48.18	41	21.82	19.50
22	51.30	46.68	42	20.40	18.24
23	49.80	45.18	43	19.02	17.02
24	48.28	43.68	44	17.68	15.82
25	46.74	42.16	45	16.38	14.64
26	45.18	40.64	46	15.10	13.50
27	43.60	39.14	47	13.84	12.38
28	42.00	37.66	48	12.62	11.28
29	40.40	36.18	49	11.42	10.20
30	38.78	34.70	50	10.24	9.14
31	37.16	33.24	51	9.10	8.12
32	35.56	31.78	52	8.00	7.14
33	33.96	30.34	53	6.92	6.16
34	32.38	28.92	54	5.84	5.20
35	30.82	27.52	55	4.78	4.26
36	29.28	26.14	56	3.74	3.34
37	27.76	24.78	57	2.74	2.46
38	26.26	23.44	58	1.80	1.62
39	24.76	22.12	59	.90	.80

*The Board of Trustees, *Provisions of the Teacher Retirement System of Georgia*, Bulletin (Atlanta, Ga.: Georgia Teacher Retirement System), March, 1944.

NOTE: The age when the member starts to contribute is shown in the first column of the table. In the two succeeding columns are shown the percentage of the average annual compensation of the 5 years preceding age 60, payable as allowances for members beginning to contribute at the various ages shown. For example, take the case of a woman beginning to contribute at age 20. At age 60 she will be eligible to retire, and it is computed that her contributions with interest together with the contributions of the state and local employer would provide approximately 49.68 per cent of the average annual compensation of her last 5 years of service as a retirement allowance if her salary follows the average trend of salaries. Suppose her average final compensation is \$1,500. She would be entitled to a retirement allowance of approximately 49.68 per cent of \$1,500 or \$745.20 per annum.

salary are accumulated at interest and at retirement are used to provide his annuity. The pension is provided by the state and the local employer and is equal to the member's annuity at age 60.

The combined annuity and pension will be the retirement allowance payable, unless the member has prior service credit. If the member has credit for service prior to July 1, 1943, he receives an additional pension for such service, which is equal to the combined annuity and pension which he would have received at age 60 if he had contributed during prior service.

The accompanying table indicates approximately the allowance provided at age 60 for members who begin to contribute at ages shown and whose salaries increase according to the average.

Evaluation of the Plan

The membership of the Georgia teacher-retirement plan is broad, including essentially any person engaged in educational work of a professional nature in any state-supported school or college.

The system is patterned after the oldest and best retirement systems known. The financial provisions of the system have been carefully planned and include the necessary safeguards for keeping the system permanently in a sound condition.

The control of the system lies in the hands of school people, and is governed by a non-political board of trustees which is elected by the Assembly of the Georgia Education Association.

The benefits of the law compare favorably in points of liberality with the benefits provided under other retirement systems for teachers in the nation.

It seems that a retirement system planned, controlled, and operated as outlined above is bound to be very successful. It is certainly a tribute to the teachers of the state of Georgia.



The Board of Education of High School District No. 2, Chouteau County, Big Sandy, Montana. Left to right: B. H. Gullickson, chairman; Otis Misfeldt; Julius Nygard; Henry Jappe; Earl King. Standing: Walter Tschirgi, clerk. The board is making plans for the erection of a high school to cost \$180,000, construction to start when materials and labor are available. Mr. Gullickson is first vice-president of the Montana State School Board Association.

Radio Instruction in Chicago High Schools¹

District Superintendent John W. Bell

Almost completely revised, the English curriculum for the Chicago high schools now provides systematic and well-integrated instruction in radio for all students enrolled. Because of time limitations the important contributions to training in this field made by the Chicago Radio Council, the Central Radio Workshop, the local high school radio workshops and the incidental use of the radio in connection with departments other than that of English will be passed over with only a casual mention. These have already received some attention in previous meetings of the Association.

In each of the three years of required English in the high school are included systematic activities and experiences with radio, correlated with those provided for other recently recognized media of communication: the motion picture, the newspaper, and the magazine. Instruction in radio is designed to achieve such desired outcomes as these: (1) application of techniques for discriminating selection of radio programs; (2) understanding and appreciation of the role radio plays in formulating and modifying public opinion, standards of conduct, feelings, attitudes, understandings, and appreciations; (3) satisfaction of the widespread urge to participate in broadcasting, to try out one's talents for appearing before the microphone; and (4) improvement of the student's reading and listening, writing and speaking, which must necessarily result from language experiences in an area in which students have a real interest.

A notion of the scope of the instruction in radio provided in the new English course may be gained from the mere statement that it includes a total of 59 radio activities, activities involving careful listening, reading, discussing, writing, broadcasting, observing, collecting, and making needed materials, evaluating, and, above all, reflective thinking.

Although a brief résumé such as this must necessarily be general and rather abstract, the following examples of activities designed to achieve the chief objectives will lend concreteness to the presentation.

1. Desired outcome: Application of techniques for discriminating selection of radio programs.

Grade 9: Prepare a personal log for a week of well-balanced radio listening. Record for each program the name, the time, and the station outlet.

Grade 10: After a week of critical listening, prepare a three-way log of the radio programs which offer you the most in: (a) information, (b) entertainment, and (c) aid in solving personal problems.

Appoint volunteer committees to survey for a week special types of programs. Let each committee report to the class on "recommended listening"



An Eighth Grade Class listening to an "American Neighbors" broadcast as a help in creative art.

ing" for that type. Each committee should state for each program in its report: (a) the time of the broadcast; (b) the length of the program; (c) features of the performance, and (d) the type and merit of the advertising, whether it be testimonial, written into the script, or unrelated to the script. Try to have a committee report on each of these types:

Discussion	Dramatic sketch
News comment	Serial
Concert	Sports
Variety	Quiz
Interview	

Grade 11: Survey critically a number of radio dramas and report on one of these:

- Fair (or poor) characterizations of young people
- Occupations represented by radio characters
- Stereotyped characters in radio drama.

The discriminating listener selects his radio fare with care. He attempts to apply specific standards of appraisal to each type of radio program. Have committees formulate rating sheets for types of radio programs.

2. Desired outcome: Understanding of the role radio plays in formulating and modifying public opinion, standards of conduct, feelings, attitudes, understandings, and appreciations.

Grade 9: Discuss with your group the differences which must be made in writing and interpreting a radio play because the actors remain unseen. The stage or motion-picture producer may make use of scenery, costumes, and lighting to effect a mood. What must a producer of radio drama substitute to create a mood or a dramatic effect? The actor whom you can see assumes identity and becomes a personality partly through his appearance, his facial expressions, and his gestures. How do you distinguish radio actors? (a) How do you know that an actor in a radio drama has struck a match? (b) How do you know that he has taken a book from the table? (c) How do you know that Mary is very angry when she talks to Virginia?

Grade 10: Prepare, with a group, a log of radio programs which best portray democratic practices in action. Survey particularly, for such a log, programs which make use of forum discussion, biographical sketches, and drama.

Of the popular continued sketches or serials, which employ believable, lifelike American characters? Which treats themes realistically and which ones satirize human weaknesses or American foibles? How true of American experience is the "newsie-to-bank-president" story? List on the blackboard the dramatic programs most commonly heard by the group and discuss: the (a) characterizations, (b) content, and (c) humor, as honest reflections of life in our country.

Grade 11: List current programs which, in your opinion, (a) promote critical thinking or (b) promote understanding of urgent social problems.

Radio programs, like motion pictures and print, affect attitudes and actions. These media of communication can provoke sympathy, or ill-will toward a nationality, a race, an individual, or an occupational group. A few commentators and other radio speakers carry their pet prejudices with them to the microphone. Most of them, on the other hand, subscribe enthusiastically to a brotherhood of men. Discuss types of propagandizing which you have noted in your listening.

3. Discussed outcome: Satisfaction of student's desire to broadcast, to appear before the microphone.

Grade 9: With a group, plan and present a simulated radio broadcast. Your activities will include (a) selection of talent, (b) preparation of script, (c) assembly of equipment, (d) rehearsal (with sound effects and timing), and (e) actual presentation. You may wish to write into your script commentators' reports, reviews, interviews, or dramatizations. Your program may honor a celebrity. It may dramatize an historical event, a school event, or a literary favorite. It may promote some aspect of safety or of current civic responsibility.

Grade 11: Try writing original dramatic scripts or try adapting literary selections to be presented by your group.

Arrange a discussion broadcast. Make special effort to select a suitable topic. If you wish, you may take as a model a program such as "America's Town Meeting of the Air," "University of Chicago Round Table," or "Northwestern Reviewing Stand." You may wish to examine available pamphlets recording programs of this type.

Our experience with radio instruction in

¹This paper was prepared for the canceled 1945 Chicago Conference of the American Association of School Administrators.

the Chicago high schools has revealed (1) that students enjoy their work with this newer medium of communication, (2) that the teacher of English must bestir herself to get on the beam, so to speak, in order to be able to handle the work as well as she handles the

type of work that has traditionally been her stock in trade, and (3) that we will need several more years of experience with this type of instruction to develop the techniques, materials, and attitudes needed for achieving optimum results.

Radio in the Chicago Elementary Schools¹

District Superintendent Douglas F. Van Bramer

From the kindergarten through the eighth grade in the Chicago Public Schools the radio broadcast has become a living textbook under the able direction of the classroom teacher, and a source of enlightenment, inspiration, and interest to thousands of children in our elementary schools. Station WBEZ, "The Radio Voice of the Chicago Public Schools," owned and operated by the board of education, is on the air every school day from 9:30 A.M. to 3:15 P.M. Programs especially prepared by the Radio Council of the Chicago Public Schools and synchronized with the curriculum of the primary, middle, and upper grades provide boys and girls of all age levels with rich, varied, and broad opportunities for learnings in many areas of the curriculum.

In the kindergarten and primary grades little children listen with interest to the program *Bag of Tales*, a storytelling program featuring animal and bird stories. *Lady Make-Believe*, designed for classroom use in the intermediate grades, brings to the pupils the enjoyment and appreciation of some of the world's classics in children's literature. For the fifth and sixth grader, *Your Science Story Teller* every Tuesday supplements the regular science course of study. *America's Heroes*, *Westward Ho!*, *Places and People of the Far East*, *Let's Look at Canada*, and like programs—all effectively enrich the work of the classroom teacher in the social science areas on several grade levels, capture the interest of growing boys and girls, and give body and substance to the curriculum. *That's News to Me*, on the air several times daily, brings the entire world of today with its happenings directly into the classroom. These and similar board-of-education broadcasts over WBEZ, along with programs from other stations and networks recommended for classroom use—all announced in a weekly program bulletin from the radio council sent to each school—make the direction of learning through the radio a vital factor in classroom management.

Co-ordinating Broadcasts with Curriculum

To assist the classroom teacher in co-ordinating radio broadcasts with her course of study and to help her to prepare herself and

her pupils for fruitful radio reception, the radio council provides her with much valuable material. The program schedule, which is a semester announcement of Station WBEZ, lists all board-of-education programs for the entire semester by subject matter areas giving the day, date, and hour of each specific broadcast. A teacher thus knows far in advance of a broadcast the definite time a specific program will be on the hour during a given semester.

The weekly program bulletin, which each school receives, repeats for the current week the schedule given in the semester program schedule, announces any changes in programs, and lists approved educational programs on other radio stations.

Broadcast handbooks and manuals for each program, issued by the radio council pertinent to each broadcast, prepare the classroom teacher to introduce each program of the series effectively by giving her before, during, and after broadcast suggestions. Bibliographies of books, motion pictures, museum exhibits, and related radio programs are also listed therein. With several of the handbooks go visual aids which further prepare pupils for intelligent listening and enhance the learnings derived from the broadcast. The classroom teacher with such carefully prepared schedules, guides, and materials at her convenience stands ready with her class of forty children equipped for successful radio reception and follow-up.

The regular broadcasts through the board of education are used largely in three ways: (1) as supplementary and enrichment material to the regular course of study; (2) as a motivating device in the acquisition of new learnings; (3) as a "lead" to pupil expression and activity in areas of the elementary curriculum reading: reference and recreatory in books, magazines, newspapers; composition: oral reports, discussions, written themes, scripts, etc.; art and handicrafts: posters, murals, hand work of all kinds, planning and preparing exhibits; dramatization: assembly programs, original radio programs and plays.

Variety of Broadcast Uses

While all teachers include the radio as an effective instrument of instruction in these mentioned areas, one is impressed by the fact that teachers are using the radio in almost

as many different ways as there are teachers. There is the teacher who uses a Friday afternoon literature program purely as a recreatory, conversational activity—children participating socially in a discussion following the broadcast as one does at an afternoon gathering. Another uses various broadcasts as extra listening and work periods; for accelerated pupils who report to a radio room a few times a week with a pupil leader. A third uses a daily national hookup news broadcast during the late noon recess as a "warmup" for the regular classwork of the afternoon before the regular opening of the afternoon program. Then there are the radio listeners' clubs before the formal opening of the school day and on pupils' time at home; the radio "technician" clubs; the broadcast and script clubs; the radio-art and scrapbook clubs; the radio-bulletin-board clubs that prepare the classroom bulletin board with pictures, brief announcements, lists of school library books, etc., pertinent to the regularly-planned radio lesson to be given during the weeks of such "radio bulletin exhibit."

With the Chicago elementary teacher already making such varied and effective use of the radio in her program of class instruction, with the well-prepared materials she receives from the Radio Council of the Chicago Public Schools, with the continued improvement of the radio broadcasts as to types and levels of material and synchronization with regular courses of study, and with the Chicago board of education owning and operating its own radio station, the radio has already become an instrument of inestimable educational value in the hands of the regular teacher in the classrooms of Chicago's 333 elementary schools.

WAR DEPARTMENT ANNOUNCES PROGRAM OF EDUCATION FOR INACTIVE THEATERS

Lt. Col. Spencer D. Benbow, executive officer of the education branch of the Army Service Forces, has recently announced the completion by the War Department of plans for an army education program in inactive theaters of war. European and Mediterranean theaters of operation have their plans complete and will be ready to open schools after the fighting stops. Textbooks and instructional materials and supplies have been flowing through the various ports for months.

Educational facilities similar to those existing in any large American community will be available to a majority of personnel. There will be academic and vocational instruction at upper elementary, high school, technical, and college levels. On-the-job training will be stressed. In addition, there will be furloughs for educational purposes and field trips to places of cultural and historical interest.

Four types of schools will be used in the post-war army education program: (1) the Unit School for separate units of 1000 men or less and offering literacy training, elementary school subjects, a standard high school curriculum, vocational courses, and junior-college courses; (2) the Technical School offering a variety of vocational courses; (3) the army University Study Center offering higher education in the liberal arts, sciences, and professions; (4) Foreign Civilian Colleges and Universities offering definite educational and cultural advantages for the greatest number of military personnel on temporary duty basis.

¹This paper was prepared for the 1945 Chicago Conference of the American Association of School Administrators.

Permanent Teacher Tenure Versus School-Board Authority

Logically can there be such a thing as permanent teacher tenure? In a time of great social, economic, and political transition in which public education must keep abreast of changes, can state laws be so framed as to grant so-called "civil service" permanence under all conditions? Most importantly, where there is conflict of opinion between the school board and its authority against some stand of a teacher under tenure, which side must give in?

In February in Illinois an appellate court affirmed a decision of a circuit court of Cook County which ruled that a teacher in an elementary school district of Oak Park who violated rules of the board of education by marrying during her incumbency was not protected by the tenure law. The record of this case was fully described in the *Journal* of October, 1943, except that at that time the case had moved only through a hearing of the school-board action and a subsequent appeal and hearing before a formally appointed appeal committee as provided in the Illinois tenure law. Now the case has been carried through two court decisions.

Briefly, a woman teacher had been employed by the board in 1931. The board had in effect rules that married women teachers would not be given "regular" appointments, but they could be employed as "substitutes." The teacher in question married in 1933 and served as an admittedly "good teacher" for ten years before the board forced a disclosure of her married status. Upon being dismissed, she asked for a public hearing as provided for in the tenure law. This was granted, but the board reaffirmed its original position, even though the personnel of the board had slightly changed meanwhile. The teacher then appealed under the law from this decision to the county superintendent, who appointed an appeal committee of three members to hear the record of the case. The tenure law does not permit fresh evidence to be introduced before the appeal committee. This committee after public hearings approved the action of the board of education as within the powers of the board, though deploring the rules by which the action was taken by the board. Incidentally, all the members of the appeal committee had been associated with school systems which employed married women teachers and approved of the policies of such systems, even though they said they were in duty bound to support home rule of the schools when such rule might inflict a hardship on a given teacher.

The Board's Powers

School laws in the various states differ markedly. As a body of law, however, decisions tend to make for uniformity under the practices of the so-called "American way of

life." One of the principal factors in the body of law is the interpretation of the powers and responsibilities of the school board as an institution. In the hearing of the case in question before the appeal committee, it was apparent that teachers in the audience really did not know the difference between a school board and some small pressure group organized outside the law. The record of the case shows that the teachers of the school system could easily have been led astray in their own judgments of the school board by the fact that professional educational opinion had been given them that, upon the passage of the tenure law, women teachers could be married with impunity, notwithstanding the rules of the school board. Thus there is a great confusion even among professors of education as to where school-board authority ends.

The large body of educational opinion on this score possibly can be epitomized by a quotation repeated at this late date from the 1906 report of the School Committee of Boston as printed in the survey just completed of the St. Paul, Minn., public schools:

"The schools belong to the people. The board is elected by the people and is the supreme and final source of authority, subject only to the will of the public itself. The authority of the board must be completely recognized. . . . The authority and dignity of the board is greater if by its legislation it defines the general policy of the schools, holds the officials responsible for results in accordance with this policy and becomes the court of final appeal for questions of major importance."

In the case under discussion, the original appeal committee followed in its opinion very closely the logic of the foregoing. So significant was this decision that the appellate court included the committee's opinion in full, as follows:

"The appeal committee is of the opinion that the permanent interest to be considered in the operation of the public schools *should* be the education and welfare of the children.

"We believe it was unreasonable for the Board of Education of School District No. 97 in Cook County, Illinois, to deny Genevieve Christner Wilcox her contract merely because of a change in her marital status. There is no evidence to the effect that the change in her marital status affected her ability to teach or that it affected her rating as a good teacher. The concealment of her marriage and the deception practiced are the direct result of the policy of the board and her human desire to hold her position under the circumstances.

"However, we further believe the question of employment of single or married teachers or both at present is a matter of policy to be determined by home rule. Under the present law, only the citizens of the school district

can, if they so desire, change the policy of the board.

"We believe it is beyond the scope and power of our official duties to disturb the home-rule principle; therefore, under the circumstances and in the opinion of the appeal committee, we feel we have no other alternative but to hold that the employing board was the duly authorized agency of the citizens of the school district and legally had the authority and power to render its decision."

Causes for Dismissal

There is much difficulty in enacting laws which will cover all situations in a state. It is common contention that a board which has the power to employ has likewise the power to dismiss. On the other hand, there is much merit to teachers' claims for protection against capricious decisions of biased and political boards. It is practically impossible to write into state laws provisions which can specifically describe all the conditions under which boards would be justified in dismissing teachers. Usually the laws specify immorality and other actions which never could be proved in most cases. Also under the broader interpretations, the boards are permitted sufficiently broad powers not to permit the "freezing" of incompetents in their position. During the current period of great teacher shortages there have been almost ludicrous attempts of boards to write contracts which would let down their bars on teacher qualifications temporarily but which would let the boards dismiss teachers after "the duration" for not being up to standards.

As one observes the numerous alleged causes for dismissal of staff members in the face of tenure laws, it becomes more and more apparent that the dividing line between adequate and inadequate qualifications is very faint. Time and again, there are nebulous conditions which are extremely difficult to classify as detrimental to the general welfare of the school system. These conditions may be present but not in an aggravated state, yet be slowly developing adversely.

Age produces some of the more important changes in teacher capacity to work, to give and take, to be alert and highly interested, and so on. Judgment on this score is evidenced by the wide spread in rules on retirement ages, with gaps as great as 15 years between given boards. There are many statements of borderline cases of inefficiency or inability remotely traceable to uses of liquor or narcotics. Psychiatrists describe some cases as "disassociates." Then there is a wide chance for misunderstandings and differences in opinions of teacher growth and development. The educational magazines are filled with the disputes of the "traditionalists," the "essentialists," and the much-abused "progressives." Local pressure groups can cause much trouble if some leader "picks on" a given teacher or group because of certain attitudes or beliefs.

In a community which is endeavoring to surge forward and keep abreast of the times,

(Concluded on page 72)

The Reorganization of School Districts

T. C. Holy¹

This paper was prepared for presentation before the County Superintendents of Schools Association of Illinois on December 27, 1944.

Nearly 300 years ago the town or township school district organization had its origin in the New England States, particularly in the Massachusetts Bay Colony. As the Northwest Territory and the Louisiana Purchase were developed and new states created out of those areas, most of them adopted the township as the local unit in the development of their program of public education. Someone has aptly put it that, educationally speaking, when it rained in New England, we rolled up our trousers in the Middle West.

Since public education in this country did originate in the local community, it was only natural that that same local community should be the unit of organization and control. In Ohio, for example, the typical procedure in these communities was for the teacher to draw up an article of agreement binding himself to teach a school in some specified house for a term of 13 weeks, 6 days per week, and 8 hours per day, for which service the patrons agreed to pay him a stipulated sum, ranging from one to two dollars for each pupil, one half payable perhaps in wheat, and the balance in money at the close of the term. As a part of his compensation, the teacher boarded around among the patrons of the school. In those early communities, he was highly regarded, so his coming to a home was an important event.

So firmly was the practice established for the school to develop within the local community that 45 years elapsed between the time Ohio was admitted to the Union as a state and the time when legislation was passed setting up the machinery for school organization on a state-wide basis. This was known as the "Akron Law" and was passed in 1847. It provided for the election of school boards and fixed their authority. The experience in Ohio in this connection is undoubtedly typical of that of other states in the Middle West.

With the development of the internal combustion engine, which as you know was the forerunner of the automobile and the school bus, the development of good roads, and a more extensive program in both the elementary and secondary school fields, this district method of school organization has long been outmoded. However, it is still with us and constitutes one of the major problems which public education now faces. In fact, it is so important that any discussion of changes needed to improve public education starts with the premise that the first job is that of reducing the number of school units. The familiar figures that in round numbers there are more than 100,000 separate school dis-

tricts in the United States with 500,000 board members, and nearly a million teachers, have been used extensively in pointing to the fact that a major problem is that of reducing this large number of separate school districts. In the December, 1944, issue of *The Nation's Schools*, there is an editorial in which this statement occurs:

There are many weak spots in the operation of public education and the schools are capable of much improvement. Many of these weaknesses will disappear as the states eliminate their obsolete, frontier-primary-district systems to meet modern conditions. These structural improvements in 25 states will represent one of the greatest post-war advances.

Moreover, the White House Conference on Rural Education held last October gave extended consideration to the problem of school district organization in the rural schools. One of the ten committees into which the Conference was divided dealt with the problem of the "Organization and Administration of the Rural School." Also, the Committee on the "School Plant and Equipment," of which I was chairman, devoted considerable attention to this problem.

Advantages of Larger Districts

Further evidence that this is a major problem is found in my experience in working with a legislative commission in Ohio known as the Ohio School Survey Commission. More than a year ago we agreed to make basic studies in the fields of school transportation, state subsidies to education, and plant and equipment rehabilitation needs in the financially weaker school districts of the state. Without exception, I think, at every meeting of the three subcommittees into which the commission has been divided and of the commission itself, there has been the recognition that if a more satisfactory district-organization system could be provided, most of the other problems would be solved. This applies in particular to transportation, small schools (both elementary and high), difference in financial ability, and its resulting difference in tax rates, supervision, and the like.

Because of this general belief that larger school districts have definite advantages, it seems appropriate to indicate here some of the benefits which ought to accrue if school units were increased in size. Among these are the following:

1. Reduced general-control cost and other overhead costs.
2. With larger administrative units, a board of education is able to pay a higher salary to its superintendent and should, therefore, attract better qualified persons for that position.
3. Larger school districts have larger schools. The per-pupil costs in these are lower and the educational offering more satisfactory.
4. Better school services, such as health guidance, vocational opportunities, and super-

vision can be provided in the larger administrative units.

5. Economies can be effected by purchasing supplies in larger quantities. For example, certain counties in Ohio have systems of voluntary purchasing of supplies on a county-wide basis. Careful estimates in these counties show that savings of approximately 25 per cent result from this plan of purchasing.

6. Transportation in larger units can be carried on more economically. Our study of bus-route maps shows that frequently buses of two or more different districts travel the same road. Furthermore, one Ohio county superintendent has estimated that he could annually save \$33,000 in his county if he could provide transportation on a county-wide basis. In connection with our studies for the School Survey Commission, we have concluded that an annual savings of at least a million dollars could be made if transportation in the county school districts were under the control of the county boards of education.

The Ohio Experience

Since we in Ohio have been wrestling with this problem for a long time, I would like to review briefly our progress to date. In 1914 a newly enacted school code provided, among other things, for a county superintendent of schools, a county board of education, specific means for changing school-district boundary lines, and other provisions designed to improve public education in the state. County boards of education, for example, were given authority to change school district boundary lines through the creation of new school districts from two or more existing districts, and for the transfer of territory among districts within the county system. These provisions continued until 1935, when the present School Foundation Program was enacted into law. One provision of that bill required that each year for the years 1935, 1936, 1937, and 1938, each county board of education should prepare and submit to the State Department of Education a plan of organization for the ensuing year. This plan was accompanied by diagram or map of the county showing the "location and position of all school districts therein, the location and character of roads, the location of streams and natural barriers, the location of each school building and each route over which pupils are transported, together with a statement of the size and condition of each building and the number and ages of children attending the same."

The law further provided that if the plan proposed by the county board of education was accepted by the Director of Education, then that plan became effective for the following year. In 1943 a School Code Commission, charged with the responsibility of recodifying the school laws, made certain

¹Director of the Bureau of Educational Research, The Ohio State University.

changes in that provision, and these were enacted into law that year. Specifically, it required that every two years each county board of education should prepare a plan similar to the one described above. At the present time, the School Survey Commission, to which I have referred, is giving consideration to some changes in the law which we hope will strengthen it and, therefore, make it more effective. Briefly, the net results of these 30 years of experience in school district reorganization are as follows:

1. In 1914 there were 2594 school districts in the state. At the close of 1944 this number has been reduced to 1637.

2. In 1914 there were 9489 one-teacher schools in operation in the state. By 1929 this number had been reduced to 4624, while by 1936 the reduction had continued until there were 2387. At the end of 1944 only 656 one-teacher schools were still in operation.

3. The first centralized school in Ohio was opened in 1898. By 1914 there were 110 such schools. At the present time, there are more than 2000 centralized and consolidated schools in the state.

4. Although a few school districts provided transportation for pupils, none was required prior to the new school code of 1914. However, as early as 1897, one district provided transportation for its pupils. The following quotation is taken from the specifications drawn by this district which is located in Champaign County:

The horse to be gentle enough to be safe. The wagon to be large enough to comfortably seat all pupils; strong enough to be safe; closed up to shield from cold and storm and provided with springs, brakes, etc., in modern style, seats on sides and open at rear. The contractor to give bond for the faithful performance of service in a sum equal to two months' salary.

At the present time, some 300,000 children are transported daily at a cost of about six and a half million dollars. Of this amount, the state bears about 85 per cent of the total cost. In more than a thousand school districts, the state bears the entire cost since they are additional-aid districts and may, therefore, receive the total cost of transportation and tuition as a part of the School Foundation Program.

5. The School Foundation Law enacted in 1935 provides that any school having an average daily attendance of less than 180 children in either grades one to eight inclusive, or grades nine to twelve inclusive, may not participate in the state subsidies under the School Foundation Program, unless such schools are, in the judgment of the superintendent of public instruction and the state controlling board, "essential and efficient parts of the state school system." The law further requires that the state director of education shall set up graduated amounts for schools less than 180 children in average daily attendance which are permitted to operate. At the present time, a school having an average daily attendance of 30 would have a Foundation Program of \$141.53 per pupil, as compared with \$67.50 for schools meeting the 180 average daily attendance requirement.

However, the School Survey Commission will probably recommend to the legislature that these graduated subsidies be gradually reduced so that by 1950 no additional increment shall be allowed for high schools with an average daily attendance below 80 pupils.

6. For a six-year period—1929 to 1934—the state made provision to assist the financially weaker school districts in erecting new buildings, making additions, and purchasing new equipment. Most of these new buildings were designed to decrease the number of school districts in the state. During that period the state subsidized to the amount of \$4,108,006.

7. At the close of 1944, 31 of the 88 counties in the state had no one-teacher schools in operation.

Although we have made considerable headway, we still have not reached the goal. I think most of us are convinced that that goal ought to be a county unit under a single board of education. This unit, however, would exclude the 113 city school districts and the 88 exempted village school districts. In the event that we do not succeed in getting the county unit, then the next most important step, as the survey commission sees it, is that of getting all the territory in the state in school districts which offer a 12-year program. At the present time, we have some 600 districts that operate only elementary schools, sending their high school pupils to neighboring districts on a tuition basis. The state bears most of the cost of this tuition.

Bad Situation in Illinois

So much for the situation in Ohio. In looking through the annual reports of the Superintendent of Public Instruction in Illinois, I find that in 1941-42 there were 12,027 school districts, distributed as follows: (a) elementary, employing one teacher or transporting from one-room schools, 9686; (b) independent four-year high schools, 617; (c) unit districts with grades one through twelve inclusive, 109; (d) all other, employing two or more teachers, 1615.

So far as I know, no other state has as many separate school districts as does Illinois. In looking through the report of the study of local school units in Illinois made in 1936-37, I note a statement that Illinois had approximately one seventh of the total number of school districts in the nation. It may be that substantial progress has been made since 1941-42. Although I spent some time in examining the Illinois laws, I am not entirely clear about the present procedures for changing school district boundary lines. I did note in the 1943 supplement to the Illinois school law, Section 84-b dealing with community consolidated school districts, Section 91-d dealing with high school district boundaries, and Section 96-a dealing with changes in boundaries. I found that in all three of these sections action can be initiated only through petition of the legal voters in the territory concerned. In the light of that requirement, my guess is that not much action has come from these statutory provisions.

County School Units in West Virginia

In connection with the county unit for school administrative purposes the recent experience in West Virginia is of interest. In 1933 the legislature in West Virginia passed the County Unit Bill, which made the county, rather than the local district, the unit for both school taxation and administration. More specifically, the bill abolished all previous boards of education of magisterial and independent school districts and placed the title of all school property and the control of all educational affairs in each county in the hands of a county board of education of five members elected at large by the people. To my knowledge, this was the most complete change in school organization which has been made by any state. One of the very difficult problems to deal with was the matter of outstanding bonds which the various districts had at the time the county unit was created. This was dealt with by requiring each such district to continue its levies for debt service until the bonds then existing were liquidated. Another problem was who would be the head of the county system. The law provided that the county superintendent of schools should have that responsibility. In the counties where there are larger cities, the practice has developed of assigning an assistant county superintendent to be responsible for the schools of the city.

Another important effect has been the leveling process. In West Virginia, as in most states, the per capita wealth is higher in the cities than in the rural districts. By putting the two together, the net effect has been to reduce the support in the cities and increase it in the rural districts. The counties have the same salary schedule which means that city teachers probably get less than they would have had the city continued as a separate district, whereas the rural teachers get more. At first there was much confusion, but after two or three years, most of the difficult problems have been solved and the system seems to be operating quite satisfactorily. I think this is particularly true in transportation.

Michigan Proposes Reform

In the state of Michigan a public school study commission appointed by the state superintendent of public instruction has worked about two years in developing extensive recommendations for improving public education in the state. One part of the commission's work has dealt with the problem of reorganizing the school districts of the state. Briefly, as reported in the April, 1944, issue of *The Nation's Schools*, the commission recommends that

... the 6274 independent school districts be reorganized into 253 districts in four legal classifications. Three of these administrative units would continue as the present types of city school districts having in excess of 10,000 population. The new fourth legal classification may be described as the community-type secondary school attendance district. It would be organized to include the urban inner core together with the surrounding and immediately related suburban and rural territory.

Representation from the more dominant interest groups is to be achieved through an eight-member board of education. The interests of local citizens would be safeguarded by local revision committees with final approval of the proposed district by the local school electors. It is believed that financial inducements for capital expenditure or current operation should be given to obtain acceptance of the plan.

The recommendations of this commission will be before the next legislature. Since constitutional changes are required to effect this structural reorganization of Michigan school districts, I do not know what the chances are of these being made. Because of the sweeping character of these recommendations, I would expect considerable opposition.

Older Progress in New York

In the state of New York, there has been in existence for many years a type of district known as the union free school district. Such

districts are made up of a combination of independent districts and when approved by the state have generally received from the state 25 per cent of the cost of the buildings needed for the consolidation. Although they have made considerable headway, New York state still had 3414 one-teacher schools in 1941-42.

In Iowa much consolidation took place during and just immediately following World War I. In one of those years, it was said that there was an average of one new consolidated school for each day in the year. However, the program has somewhat bogged down, so that less consolidation has taken place in the state in recent years. Two of the retarding factors have been the differences in tax rates in consolidated versus the one-room school districts and the lack of satisfactory roads for transportation purposes. Considerable

headway is being made in the latter and legislation is being proposed to increase greatly state subsidies to all types of schools in the state.

Most of the southern states and two of the western states now operate on the county unit. Among the states having this plan are: Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, North Carolina, New Mexico, Tennessee, Utah, and Virginia.² To this list should be added West Virginia.

In conclusion, I want to reiterate that, in my judgment, the most pressing problem facing public education in states having the local district system is that of finding a type of school organization which is in keeping with present social and economic conditions.

²Cressmore, George R., *Local Units for Educational Administration*, University of Pennsylvania, 1932, p. 2.

Joint School and Community Planning¹

Calvin Grieder

A survey² of cities over 100,000 population which I made last fall showed that only in about 40 per cent of the 63 respondent cities (69 per cent of the total in this population class), does a close relationship obtain between municipal and school district planning authorities. In about the same proportion there is no joint planning, and in the rest there is an informal type of cooperation. It is likely that an even less satisfactory showing would be made in a study of cities of less than 100,000.

There is, of course, no compulsion on school districts to cooperate with city-planning commissions, or to obtain their approval. The status of public education as a state function, abundantly upheld by a long chain of court decisions, seems logically to preclude the requirement of approval by municipal bodies of educational plans. This position is illustrated in a recent Minnesota case, where the supreme court held that the Minneapolis school authorities cannot be required to have the city-planning commission's approval for their projects. This places a premium on statewide planning that is lacking in most states.

Cooperative Approach

However, in the face of preponderant opinion on the values and wisdom of joint planning, it would seem excessively foolish for school authorities to make unduly an issue of their "rights" to independent planning of school facilities. In California this cooperative approach is given legal sanction by requiring approval of regularly constituted planning bodies before school sites may be purchased.

This seems the preferable position. School sites, parks, playgrounds, community centers, and other public—and indeed private—developments ought to be planned as integrated wholes for best results.

The saddest features of the planning picture are the complete lack of joint planning in many centers,³ and the tardy recognition of the need for planning at all in others. It is safe to say that no American city over 100,000 population has a school plant that would "score 1000 points" or anywhere near it on a standard rating scale. That being the case, every city school system needs to be actively engaged in planning, if not for the *expansion* of the plant then for its *improvement*. The latter may be along lines of replacement of present units, relocation of attendance centers, and site development (which is grossly neglected in most places).

To embark on any phase of over-all plant development without regard for the planned pattern of city growth or improvement is inexcusable. It leads to the emergence of hazards, wasteful duplication of facilities in some areas, inadequate services in other areas, and an unnecessary drain on resources. Where general city planning is not in progress, as is the case in some cities, school authorities may be able to arouse enough interest in planning to get city planning under way. This is being attempted in a few places.

Evil Effect of Lack of Planning

The planning of American cities is a very new process, with few exceptions. If cities had been planned from the beginning, we should now be spared much of the deterioration of our cities with which we are now plagued. Our schools and parks and neighborhood centers would be integrated wholes instead of haphazard patchworks. There would

have been prevented what happened in Des Moines, where 36 of the 46 elementary centers are located on or within a block of existing or proposed arterial streets. There might have been prevented such a development as occurred in Cleveland, where there are enough vacant rooms to house about 12,000 children, or one fifth of the K-6 enrollment.

Cities and school districts can greatly benefit each other by cooperative planning. Probably no single condition aggravates the difficulties of municipal administration more than the mobility of the people. Well located schools tend to tie down the population, and hence to make more economical the provision of such services as streets, garbage collection, mail delivery, and gas, water, power, sewer, and telephone lines. The school district benefits from the assurance that its plants will be utilized to a reasonably high level for a reasonably long period of years. Undue population mobility can be controlled, and high tangible and intangible returns will result from such control.

Currently school-plant planners are more conservative than a decade or two ago. Very few forecasts are being made for longer than six years. A large proportion of the plans consist of projects for remodeling and adding to existing structures.

There is a slight tendency for cities west of the Mississippi to be more active in planning than cities in the East. One of the most impressive programs is that of New York City, where about \$120,000,000 will be needed for school sites and buildings. This is nearly 10 per cent of the total New York City postwar plan. Scrupulous care is exercised to utilize all available data related to general city planning. Other good examples are found in Los Angeles, Detroit, Baltimore, Des Moines, Portland, and San Francisco.

¹Condensation of talk prepared for A.A.S.A. meeting at Denver. The writer is Associate Professor of School Administration, University of Colorado.

²This survey is reported in the 1945 edition of *American School and University*.

Art Accommodations for Postwar Schools

Leon L. Winslow¹

Although it may not be correct to assume that art-education programs are good to the extent that housing, equipment, and supplies are provided to make them so, it is, nevertheless, true that the instruction offered cannot be effective without these facilities. The typical schoolroom in the older type of building is perhaps the most dismal of all the gloomy rooms that can be seen or imagined, surrounded as it generally is, on three sides, by blackboards which are literally as well as nominally black. Is it to rooms such as these that we must resign our children for a large part of the formative period of their lives?

With a view to providing specifically for the needs of the classes in art, the Division of Art Education of the Baltimore public school system has prepared the specifications that follow. Some of them, particularly those relating to color, might be extended to include all the rooms in a school building. Drawings showing plans and elevations of these art rooms were made during the past school year by boys and girls enrolled in the art-curriculum class in architecture taught by Mr. Walter R. Gale at the Baltimore City College, high school for boys. The class plans this year to construct scale models of the rooms and to paint these according to the specifications set up for color.

The new specifications provide for both art classrooms and auxiliary rooms, these taken together constituting a housing unit. In large school buildings where more than one housing unit is required, the need for rooms is to be met by providing multiples of this unit. The art classroom is one-and-a-half times as long as a standard classroom (which is approximately 23 ft. 6 in. wide, by 29 ft. 6 in. long) and should have adjoining it at the rear an auxiliary room equipped with deep shelves for supplies, exhibits, pupils' unfinished work, and other things for which there may not be space in the classroom. Auxiliary rooms are half the size of the standard classroom. The art classroom should be separated from the auxiliary room by a partition in the center of which there should be an extra-wide opening with doors sliding back into the partition. Directly opposite the doorway in this room there should be a deep soapstone sink equipped with hot and cold water, and with built-in cupboard beneath it.

Location and Lighting

Art housing units in new school buildings should preferably be on the ground floor to facilitate delivery of such materials as wood, plaster, clay, stone and metals, used in an enriched educational program, and the installation of a kiln and the necessary machin-



The Baltimore art classroom, equipped with adequate facilities for carrying on an enriched program of instruction, has been made the subject of the extended study which resulted in the accompanying specifications.

ery. To make the displays resulting from art education available to the public, the rooms should be located near the main entrance of the building and grouped together. Since the art department is often called upon to make scenery and properties for plays and other school performances, it is also desirable that the art rooms should be in close proximity to the stage of the auditorium or assembly room, if there is one in the building. Because of the desirability of uniform natural lighting, the rooms should preferably be placed on the north, northeast, or northwest side of the building, never on an interior court. Doorways should be wide, like those in hospitals. Walls and doors should be soundproof to permit the carrying on of such noisy processes as pounding and sawing.

Lighting and Electric Outlets. There should be satisfactory natural light furnished by tall windows set close together, and there should be adequate electric lighting for dark days and evenings. Opaque curtains or shades should be provided at all openings which admit light, or there should be daylight-proof shades or curtains as well as the customary translucent shades or Venetian blinds.

In the art classroom there should be electric outlets for a stereopticon-motion-picture projector and other appliances, located at the back, near the center of the room, and near the corners, respectively. There should also be outlets at the center of each of the side

walls, and at either end of the sink in the auxiliary room. The wiring for outlets in the auxiliary room should be for current heavy enough to carry the load of the kiln and other electric appliances. This will require wiring heavier than standard.

Means for Display are Important

Bulletin Boards, Blackboards, and Cupboards. Except at the center of the front wall of the art classroom, bulletin boards, of cork, should be installed on the walls for the display of illustrative material and pupils' work. These boards should extend upward from the baseboard to the height of 6 feet 9 inches from the floor. There should be a slate blackboard of standard height and in a single piece not less than 8 feet wide, located at the center of the front wall, framed in to match the trim of the room, with corkboard at each side of it and below it.

A cupboard with a standard-size sliding door should be built into the wall that separates the art classroom from the corridor, near the front of the room. It should be equipped with eight adjustable shelves. There should also be built-in cabinets at the back of all art classrooms, at either side of the central door opening, and extending to the side walls of the room. Each cabinet should consist of a deep table-high section of drawers for filing illustrative material and pupils' work and, above this, cases two shelves high for books.

¹Director of Art Education, Baltimore, Md.



School interiors must, like the interior of the home, be adapted to the needs of those who live therein; each subject-matter area of the curriculum coming in for its share of architectural consideration.

The sliding doors of these cabinets should have panels of corkboard.

Display Cases. Display cases should be built into the wall that separates the art classroom from the corridor, near the center of this wall from front to back. The cases should be equipped with fixed plate-glass show windows flush with the corridor walls. The size and proportions of these cases should be similar to those of the standard portable display cases commonly used in art museums. The hinged doors of the display cases, opening into the classrooms, should be covered with corkboard on both sides for flat exhibits, and there should be adjustable shelves of plate glass for displaying small three-dimensional objects. The cases should be illuminated with concealed fluorescent lamps.

The Decoration of Art Rooms

The colors used in painting all rooms should be satisfactory from the standpoints of decoration and illumination as well as aesthetically and psychologically pleasing. The accompanying diagram indicates with the use of a "color compass" recently worked out by the Division of Art Education of the Balti-

more public schools, formulas for hues, values, and chromas of color that may be considered appropriate. For rooms with a north, north-east, or northwest exposure, a warm yellow, red yellow, or red is recommended; for rooms with a south, southeast, or southwest exposure, a cool bluegreen, green or blue; for rooms with an eastern or western exposure, a neutral greenyellow or purpleblue. Hallways and rooms with no outside exposure may be painted a very light neutral gray or any hue selected from those specified for the rooms. Munsell formulas for the colors suggested for walls, ceiling, trim, doors, and floor are given in the accompanying diagram. The percentage of light reflection is indicated for all colors.

The colors should be neither too strong nor too dark, the amount of light and of strength being determined in each case by the need for light in the room. Ceilings should be nearly white to reflect as much light as possible. Where a greater contrast is desired for dado, woodwork, ceiling beams, and doors, a darker and stronger color or its complement or the hue adjacent to it in the color circuit may be used. Floors, if covered with linoleum, should be dark, about 3 value of the dominant

color of the room, not stronger than 1 step of chroma, or of neutral gray.

The fact that use and beauty are actually the best of friends may be the reason why rooms in new school buildings are so often beautiful even before they have been decorated and furnished. With their carefully finished floors, walls, bulletin boards, and woodwork these rooms seem to symbolize the great educational purpose for which they were intended. Their usefulness, both educational and material, will be enhanced, however, by the exercise of taste in decorating and furnishing. Although in school architecture good taste often implies standardization, it may with equal emphasis be said to demand variety as well. Otherwise the effect would be most deadening. The school interior must, like the interior of the home, be adapted to the needs of "those who dwell therein." Each subject-matter field of the curriculum should come in for its share of special architectural consideration. An attempt has been made in the preceding article to do this for art.

SCHOOL-BOARD SERVICE

To the degree that your school directors are alert, are critically minded, and keep themselves well informed, to that degree do they serve you well, and democratic policies and practices are maintained. After taking due counsel from all available sources, it is the business of the board of education to determine just what shall be done in this school system, and to see that it is done as is prescribed. — *J. Harry Pohlman, president, school board, St. Louis, Mo.*

AREAS	EXPOSURES							
	North	N.E.	East	S.E.	South	S.W.	West	N.W.
Ceiling	10YR9/1 72%	5Y9/1 71%	5GY9/1 73%	5G9/1 73%	5BG9/1 75%	5B9/1 75%	5PB9/1 78%	10R9/1 72%
Walls	10YR8/2 57%	5Y8/3 54%	5GY8/2 59%	5G8/2 57%	5BG7/2 47%	5B7/2 47%	5PB7/2 49%	7.5R7/2 44%
Trim	10YR6/2 28%	5Y7/2 45%	5GY6/2 32%	5G6/2 30%	5BG5/2 21%	5B5/2 19%	5PB5/2 21%	7.5R5/2 20%
Doors	10YR7/10 42%	2.5Y4/4 13%	5GY4/6 12%	5G4/4 13%	5BG3/6 8%	5B3/6 8%	5PB3/8 8%	5R3/10 7%
Floor	10YR3/1 7%	5Y3/1 7%	5GY3/1 7%	5G3/1 7%	5BG3/1 7%	5B3/1 7%	5PB3/1 7%	5R3/1 7%



Walls of plywood, a ceiling of acoustical tiles, and a battleship linoleum floor provide an almost ideal finish for the library of the Acalanes Union High School, Lafayette, California. Franklin & Kump, Architects, San Francisco.

Plywood for Schools

Fred D. Mosher

School planners would do well to look into the possibilities of plywood as a material for remodeling old buildings, construction of new ones, and for vocational and industrial classes where wood is used in workshops.

Plywood has made such strides, as to improvements, during the war that it can now be used for every purpose for which regular wood is used and in addition it can be used where anything else would be totally unsuitable.

Modern plywood is fully waterproof, pliable, impervious to warping or cracking influences, yet is easy to work; it can be molded into various shapes without causing stresses to be set up, and when molded properly it will hold its shape without change, much as metal does when it is shaped in a press.

For interior and remodeling purposes plywood lends itself readily to paneling for partition work. Since the material comes in standard lengths, the panels may be cut from sheets with a minimum of waste. For changes in classroom layout the panels may be prefabricated and easily set in place over a short period of time.

Plywood consists of an odd number of thin sheets or veneers which are cut from "peeler" logs, or logs cut specifically for plywood pro-

duction. The veneers are laid up in alternate layers, each layer having its grain opposite to that of the preceding one. The thin sheets are

glued together with waterproof glue, which after setting under high pressure are rendered strong and durable. Plywood sheets are



The gymnasium of the Acalanes High School, Lafayette, California, has wood trim and side walls of plywood. The ceiling is covered with acoustic tiles.



Walls, ceiling, and floors of the prefabricated elementary school at Vallejo, California, are all of plywood. The school contains 24 classrooms all built on one floor level and connected by covered ramps.

stronger than the wood from which they are made because of the bonding force of the glue and the cross-graining effect. Prior to the war many school systems used plywood for repairs, remodeling, and extensions. The wood has been used in many school shops with excellent results.

Since the beginning of the war the government has made extensive use of plywood, and completely prefabricated and demountable schools have been built for community needs in various parts of the United States. Two examples of demountable schools are the Carquinez Heights School, Vallejo, Calif., and the Pacific Beach School at San Diego, Calif. School authorities see in these California examples the solution of the population-shifting problem which has arisen in various parts of the country from time to time. Rather than abandon school buildings, it is pointed out, they could be demounted and moved should the need arise.

Planners, who contemplate remodeling older buildings, will find in plywood an answer to many of the questions that arise when the subject of interior rebuilding is necessary. The partition problem, already mentioned, may be solved by having the entire sections prefabricated for easy installation. Many contractors and builders are planning to enter the precutting and prefabrication field after the war. The difference meant here, between precutting and prefabrication, is that the pre-

cutting has to do with cutting sections and sheets to size while fabrication is the putting together of matched sections which are then moved to the site for erection.

Plywood in Schoolhouses

For school-building construction there are various types of plywood for both interior and exterior work. The roof trusses are made up from layers of the wood in the shapes commonly found in steel frames. Beams, girders, and other members requiring great strength have been used in buildings where plywood is the material used throughout.



Plywood provides an easily worked material for furniture and other household utilities designed and made in the school shops.

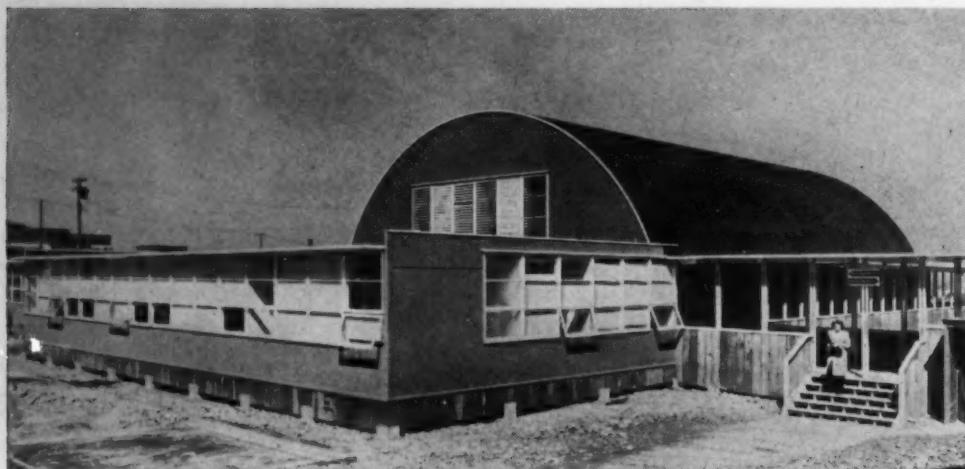
Plywood sheets normally are made in 4 ft. by 8-ft. sheets and larger sizes may be made up for special purposes.

For interior work other than partitions where a new surface is required, plywood may be applied and finished in any of the popular stains. The grain of the wood takes a fine finish, and this type of remodeling is now being done in offices, meeting rooms, auditoriums, and classrooms.

Another application of plywood is in the covering of concrete walls. Nailing blocks or plugs are set in the concrete and the plywood panels are all back primed with resin sealer to protect them where condensation may occur. For interior work $\frac{1}{4}$ -in. plywood is a common thickness, although the $\frac{3}{8}$ -in. thickness is better. The panels are nailed to studs set on 16-in. centers and nailed at 6-in. intervals along the edges. The panels may be applied either horizontally or vertically depending on the decorative treatment.

Plywood has acoustical properties that make it particularly adaptable for school use. The sound insulation value of a wall is a measure of its effectiveness in reducing the noise that may be transmitted through the wall. On the other hand, a wall's sound absorption is a measure of how much of the noise originating within a room is absorbed or deadened by the wall.

Tests have been conducted which show that partitions of $\frac{1}{4}$ -in. plywood panels on each



Important ramification of prefabrication which presages buildings of the future is expressed in this all-plywood shop-formed school erected at Vallejo, Calif., to house 1,000 children of war workers. The building, erected beside a 1,600-house development, consists of 24 classrooms in different wings, an auditorium, administration quarters, library, social room and kitchen. The entire structure is built of prefabricated plywood sections with panels glued to light framework; the structure is demountable for re-erection at another site and probably in another form, after the concentration of workers at Vallejo has been removed. Franklin and Kump and Associates were architects with William Wilson Wurster, consultant.

side of standard 2 by 4 studs are only slightly less effective than standard lath and plaster with respect to sound insulation but five times better as a sound absorbent material.

Plastic Plywood

The most modern of the plywoods is the type called "plastic plywood," a wartime development. This wood has reached the stage of perfection where it is considered a standard engineering material. The plastic plywoods have been developed to the point where molding can be done with accuracy and the bonding done without fear of failure.

The plastic plywoods find their chief wartime application in the construction of aircraft, where their ability to withstand heat, stresses, and weather make them most desirable.

Plywood of the various kinds is seen as an ideal material for vocational schools and for the industrial-arts departments of high schools.

In the building trades the prefabrication of utility houses, garages, hog pens, poultry houses, and other farm structures are viewed as a potential future industry. Prefabrication means building parts in the shop in order to

simplify transportation and facilitate erection on the site. In prefabrication all of the sections are cut according to plan and then nailed and glued into finished parts which are joined together at the erection site.

The art of using plastic plywood is still in its infancy, and users will look to the educational institutions for advancement in methods and uses. The molded shapes are formed by pressure and heat combined while the wood is shaped in the mold. Glues for bonding are of various kinds depending on the purpose for which the finished wood is intended.

Cold-setting bonds include glues such as casein and soybean, but these are the glues which are used with wood veneers intended for interior use. Urea formaldehyde is used as an adhesive that cures without the application of heat. When physical improvements are desired in these bonds they may be cured at a temperature of 150° F.

Hot-setting bonds are principally phenolic and are cured at temperatures of about 250° F. The pressures used in curing affects the properties of the plywood materially. Pressures in the order of 2000 pounds per square inch add to the tensile and comprehensive strength of the finished product.

Modern plywood may be fireproofed in a number of different ways. New developments in impregnation render the plywood impervious to water, fire, mold, decay, and attack by insects. The veneers are impregnated under heat and high pressure, rendering the finished product inert to chemical action. A recent development in fireproofing protects the wood by laminations of asbestos materials which are pressed into the plywood sheets.

What Constitutes a Desirable Classroom

J. W. Ramsey¹

In former years, the planning of a school building was often based on the assumption that a classroom was a cell—bounded by blackboards on three sides and by windows on the fourth—and there appeared no reason why all cells in the building should not be alike. Frequently more attention was given to the exterior attractiveness of a schoolhouse than to the successful planning of the classrooms. To meet specific needs, attention was given to standard requirements as to space, lighting, heating, and when that was done, you were through—you had a classroom. It mattered little if it was grim and forbidding. It was a place for studying and reciting, and making the room attractive, or providing for unusual activities would tend to distract the pupil's attention from sober matters that were found in schoolbooks.

If this picture seems overdrawn, it is only because modern educational developments make it seem so. Most of us recall from our own school days, classrooms planned with little realization of the varieties of educative

processes, and certainly with little knowledge of the influence of surroundings on mental and psychological reactions. Even today some schoolmen and architects are too much influenced by the pattern of their own youth when the chief classroom activity was recitation from a textbook. Within the past two or three decades, conceptions of education have greatly broadened, and these new conceptions, along with new findings of mental and physical science, have wrought a revolution in classroom planning. This revolution has not been completed, and never should be. The classroom of the future will differ, perhaps greatly, from the best we can design today.

But what of today, in the light of present knowledge? What is a desirable classroom? One fact is immediately apparent—there is no such thing as an ideal classroom. The human element that makes education so difficult insures that no classroom will ever meet perfectly all the needs of all the persons who will use it throughout the years. But all this does not keep school authorities from going ahead with progressive planning developments.

It is possible to design classrooms which come much nearer than many present-day

rooms to meeting the needs of the groups who are to live and work in them. In designing these rooms, one must start with the idea of accepted practices. What accepted minimums are we to follow? Let us consider some with which we are all familiar. They vary, of course; but, in general, we say that the width of the room should be from 22 to 26 feet; the length, from 28 to 36 feet; the height, from 11 to 13 feet; daylight should come from the left side only; ventilation, six air changes an hour; orientation, east or west; and glass area a minimum of 20 per cent of the floor area. Practical experience proves that for all these accepted practices there are exceptions. The widely varying climatic conditions of this country, and the different needs and problems to be met, along with new findings of science and education, require certain modifications of these so-called standards.

The High School Classroom

In discussing an ideal classroom, we can arrive at no complete, detailed plan for a specific classroom. Attention to many types of rooms is impossible in the limited scope of this discussion. At best, we can discuss the

¹Superintendent of Schools, Fort Smith, Ark.

This paper was prepared for the cancelled Denver Sectional Conference of A.A.S.A., February, 1945.

major factors which affect classrooms in general, sketch a single high school classroom, and discuss the chief differences between this room and a similar elementary classroom. Probably no general set of details can be outlined on which all will agree; the purpose of this discussion is to raise questions rather than to furnish final answers.

What should be the dimensions of our classrooms? The only satisfactory answer is that it should be of such size and shape as will permit the fullest efficiency in the work that is to go on in the room. This means that the total space required is greater than that for mere seating space. The subject and the number of students to be taught must be considered along with the need for and use of work, interest, and construction centers. The classroom of today is larger than that of the past. As for its shape, the conventional rules do not necessarily apply; often it should be wider than recent practice has usually provided. It might even be square. The deciding factor must be the activities and equipment that are to be housed.

Height of the room brings up the problems of lighting and acoustics. The modern classroom has a higher ceiling than the legal standards usually call for. It ignores the idea of light from the left side only, in favor of bilateral lighting. It favors large windows on one side designed to let in maximum light and high windows on the other side. Modern lighting-evaluating techniques show that unilateral light produces poor results as to light levels, and works hardships on students facing windows when informal grouping is used. Properly regulated lighting arrangements should eliminate glare and insure that no pupil will cast a shadow on his work. Plenty of natural light should be provided to contribute to the cheerful atmosphere of the room. Maximum glass area is well worth its cost. Incidentally, a glass may be developed which will admit a high percentage of ultraviolet rays. Also, we should not overlook the possibilities of glass brick in situations where borrowed light is needed. Natural light must, of course, be supplemented by artificial light. It has been found that most children begin school with perfect eyes, but too large a percentage finish with defective eyes. Poor classroom lighting undoubtedly is a contributing factor to this condition. We must be certain that the light in our classroom reaches the desk, and we must give due consideration to its direction, quality, and quantity. It might not be out of place to consider the possibility of automatic control of lighting.

Types of Ceilings and Floors

It has been mentioned that the height of the ceiling involves lighting and acoustics. The second of these considerations suggests that the ceiling be sloping. If the room has exposed beams, so much the better. This has been shown to be helpful in controlling echoes and reverberations. Steps should be taken in sound-conditioning the room. Good materials are available. Much of the nervous strain and fatigue suffered by the teacher, and the consequent restlessness of the students, results from the noise element. Control this factor, and greater efficiency in instruction and better conduct at the same time are assured.

What kind of a floor should this ideal room have? There are a number of materials to choose from—all subject to some objections. Maybe plastics will solve the problem. In the

meantime we shall have to choose a material which is available—linoleum, rubber tile, asphalt tile, or regular wood flooring. As for heating, why not try panel heating? This method of heating the room by warming the floor, ceiling, or walls, or a combination of these, through warm air ducts or warm water tubes, has proved satisfactory in homes. Why not try it in the ideal schoolroom?

New ideas are evolving toward the matter of wall color in the classroom. It has been traditional that paint be chosen with the idea of economical maintenance. Monotony has been one result, and indifferent maintenance has been another. One would not decorate all of the rooms in his home in one color, and a dull color at that. Why not use bright colors? These colors should be used with discrimination, of course; but blue, yellow, and bright red correctly used may produce pleasing results. Bulletin and chalkboards should be chosen with an eye to color transition rather than contrast.

Work Areas Highly Desirable

If the classroom is to be a laboratory, it should have ample storage space, provided by shelves and movable or built-in cabinets. Space below chalkboards and other areas may be utilized for this purpose.

The classroom has been referred to as a laboratory, but we have not developed it as such, except in the case of physical science. Yet the modern ideal demands that the laboratory situation be achieved in such subjects as English, social science, and mathematics. Each classroom should be equipped with reference material, supplies, tools, and adequate storage space. There should be space for an alcove or library corner, equipped with bookshelves, a round reading table, and comfortable chairs. There should be space for converting the classroom into a place where several activities can be carried on simultaneously. This requires that the furniture be light and movable. If desk chairs are used there should be available a conference table with chairs. The whole emphasis must be placed on the adaptability of the room and its furnishings to the types of activities desired. In conjunction with the classroom, it is desirable that there be a small workroom fitted with soundproof curtains. If the floor of this workroom is slightly elevated, the result is a small stage for which many uses may be found. Other desirable ideas include exhibit cases, demonstration desks, and radio and telephone facilities.

It may be asked how all these things are to be included in a classroom of reasonable size. The professional periodicals have published sketches of many rooms which include practically all of the ideal arrangements just mentioned. Obviously the planning must be done with much care for the full utilization of space and the proper spacing of the features which are fixed and immovable. With reasonable space, adequate provision for permanent facilities, movable furniture, and multi-use minor equipment, the well-planned classroom can be converted to many uses and serve all of them well.

The Elementary Classroom

Much more might be said about the high school classroom, but some consideration must be given here to the elementary classroom. This can be done briefly, not because the elementary schoolroom is less important, but

because most of the ideals affecting it have already been mentioned. The general suggestions as to room size, heating, lighting, color, and other factors apply to both high school and elementary rooms.

What special considerations apply to the elementary classrooms? If at all possible, the elementary classroom should be part of a one-story building. This is safer, and is especially desirable in view of the increasing popularity of the adjoining outdoor classroom. The outdoor teaching area should be away from the street and separated from the outdoor provisions for other groups. It should have a tree or two and provide opportunities for studying plant and animal life, and for the development of skills and knowledge impossible in the indoor classroom. In brief, it should be a place for both study and play.

In planning the elementary classroom, a primary consideration is the use of children's sizes in determining the height of all facilities such as sinks, cabinets, blackboards, as well as pictures and other things provided for the child. The windows should also be at a height which will permit the child to exercise his eye muscles by gazing into the distance.

Special equipment in the elementary classroom may well include an aquarium and increased wall space for displaying paintings and projects, toilet facilities directly connected with the room, a sink and fountain arrangement, a cloak room or lockers outside the room, a storage room, and such items of movable equipment as a cabinet, shelving, movable tool truck, tool rack, and a workbench. All of these things should be provided in a light, cheerful room marked by warm color tones, and fitted with an alcove and stage. Of course, no fixed seating is used; the furniture is suited to easy arrangements to meet changing teaching situations. The whole atmosphere should stimulate the desire to learn and create.

Adult Uses of Rooms

Finally, the ideal classroom should possess flexibility, perhaps the most important single factor of planning. This factor has been stressed in urging the trend away from the old-fashioned rectangularity of the schoolroom, and by emphasizing the need for space, room shape, and types of facilities which will permit easy adaptation to varied educational activities. There is another reason for flexibility—the demand for community use of the school buildings. The new concepts of educational facilities are not final. There will be later needs which will require different types of activity. The room that has been described here is meant to allow for adjustments to the needs of the future, both in types of activity and in purpose for which the room may be used. The requirement of usefulness outside school hours means that the room should be planned to meet the needs of the adult-education groups, recreational programs, and other community uses.

The ideal classroom would not be similar to all the other rooms in the same building. Aside from considerations of utility, isn't there a suggestion in the monotonous sameness of classrooms of a uniformity and restriction which should not exist in education? We should not be afraid of achieving too homelike an atmosphere in veering away from any suggestion of stereotyped formality. The classroom should be stimulating rather than standardized.

Better School Lighting is Possible

George H. Watson

One of the outstanding school lighting jobs in the South was recently completed in the Shades-Cahaba High School, Birmingham, Ala.

The new system, replacing one that was a breeder of poor eyesight, includes fluorescent lighting in all classrooms, also germicidal lamps to kill air-borne bacteria that produce colds and other respiratory diseases. The building was rewired throughout to insure proper operation of this modern equipment.

The old lighting, some of it not much beyond the drop cord era, averaged only about 2 foot-candles of illumination in the elementary section and 4 foot-candles in the high school section of the building. This is not more than one tenth of the standards recommended by the "American Recommended Practice of School Lighting," as published by the Illuminating Engineering Society and the American Institute of Architects.

The new system provides an average of some 30 foot-candles of light in service at desk height and is rather evenly distributed throughout the room. It serves not only the humanitarian cause of conserving eyesight — and the damaged vision through the high school level has been shown to be 20 per cent — but also tends to speed up the process of education among the pupils. Since it is a proved fact that 87 per cent of all impres-

sions are gained through the sense of sight, it follows that the more comfortable seeing conditions are made the greater is the speed of gaining knowledge.

The fluorescent fixtures are of the two-lamp ceiling type, louvered design, hung in continuous runs. Each room has two rows of the fixtures with 6 or 7 units per row, depending on the length of the room. The lamps in the fixtures are of 48-inch, 40-watt, General Electric, white fluorescent type, and fixtures are equipped with no-blink starter switches. Each row of units is controlled by a separate wall switch, so that the row nearest the windows may be operated independent of the inside row, if desired. Switches are convenient to the teacher's desk.

Fluorescent fixtures of this type provide more uniform lighting than do incandescent spot lights, spreading it out evenly over the whole room. Being a cooler light source, adequate lighting can be provided without adding discomfort from heat in the warm months. Fluorescent lighting is approximately $2\frac{1}{2}$ times more efficient than filament lamps, and the power consumed for an equal amount of illumination is considerably less. Finally, continuous strip lighting of this type minimizes the wiring problem in existing buildings. The wiring runs along as an integral part of the fixtures themselves, and thus a

minimum number of ceiling outlets are required, probably not more than one third as many as in previous types of lighting.

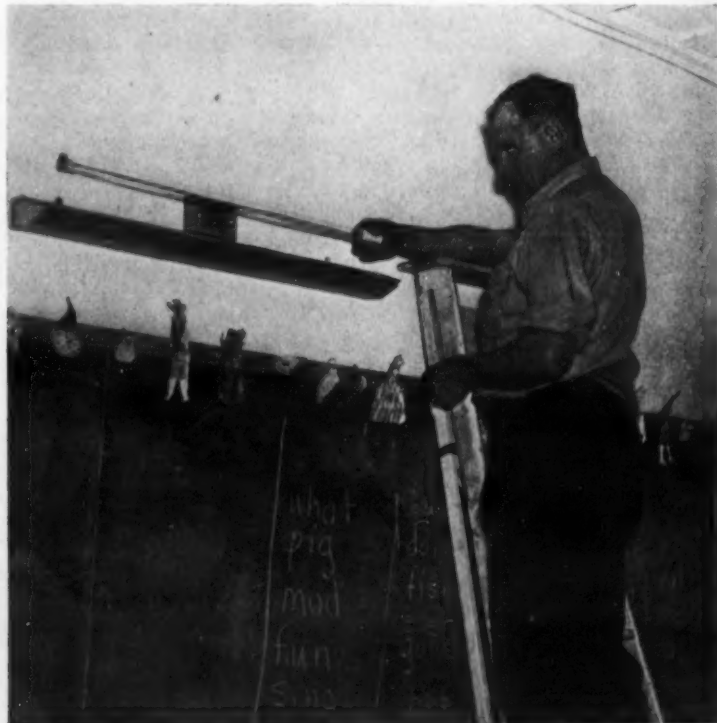
Exciting much interest on the part of patrons, teachers and pupils in this installation were the germicidal lamps installed in above-eye-level fixtures on the walls of the rooms in the elementary section and employing germ killing rays to destroy air-borne bacteria which so often keep children out of school with colds and other communicable diseases. Each fixture is equipped with a 30-watt General Electric Uviarc germicidal lamp. There are four units per room, mounted about 7 feet from the floor. These lamps provide disinfection of the atmosphere of the room equivalent to 60 changes of air per hour. The air changes in the average classroom is only seven per hour for winter months.

Limited experiments have shown that the incidence of disease among children in rooms protected by germicidal units is only 12.6 per cent as compared with 51.8 per cent in rooms without the germicidal radiation.

No lighting installation would be complete without control of natural lighting and painting of the walls and ceiling so as to eliminate glare but not absorb too much light. A total of 129 Venetian blinds were installed throughout the building, which serve to harness the natural lighting, yet eliminating glare. Bor-



The units are readily attached to the ceiling fixtures. Above the teacher's desk there is an additional incandescent fixture.



The germicidal lamp is readily installed and readily removed for cleaning or replacement. The shade is so arranged that children cannot be burned by exposure to the direct rays of the lamp.



General view of a classroom in the Shades-Cahaba High School. Two of the germicidal units can be seen at the right above the blackboard.

rowing a note from nature, the walls and blinds were painted a pastel green for maximum comfort and efficiency. The ceilings were painted flat white for high reflecting value.

Fluorescent lighting is provided for all 25 classrooms and the library, there being a total of 330 fixtures with two 40-watt lamps to

each. In addition two "lab" rooms and the auditorium, where seeing demands are more general in nature, were lighted with 20 semi-indirect units of the filament type. Corridor lighting was supplemented by installing some of the better units taken from the classrooms.

The new wiring system is of proper capacity and regulated voltage to assure satisfac-

tory operating conditions, in addition to providing for additional electrical requirements. Convenience outlets are placed in the rooms to take care of visual education needs such as slides and sound motion-picture equipment, also for power tools in the manual training rooms and kitchen equipment in the domestic science rooms. The wiring takes care of a new, automatic, stoker-fed steam heating system.

The wiring system is of the 3-wire, 115/230 volt secondary distribution type, fed from a 2300 volt primary. There are four 24-circuit and two 16-circuit distribution panels with an entrance capacity of 600 amperes.

How this school, located in the deep South where school revenues are much below the average of the nation, got an up-to-the-minute lighting system is a story in itself. It was due to the spontaneous interest shown in the school by the patrons themselves. The Jefferson County Board of Education and Dr. John E. Bryan, county superintendent of schools, were willing to help to the extent of their ability, but more funds were needed to install the new lighting system, a new heating system, Venetian blinds and to redecorate all the rooms. So the Parent-Teacher Association led by Mrs. George H. Watson, president, took over the job of raising a minimum of \$10 per child for the 967 children in the school. This goal was reached and more as \$10,457 was raised, including a \$2,500 donation from Erskine Ramsay, Birmingham financier and

(Concluded on page 72)



A typical classroom in the Shades-Cahaba High School before the new lighting installation was in use.

THE AMERICAN School Board Journal

A Monthly Periodical of School Administration

Edited by
Wm. Geo. Bruce and Wm. C. Bruce

DISCUSSION AS A SCHOOL-BOARD TECHNIQUE

THE school board as an institution of American local government is based on the theory that the thinking and action of the small representative group is superior to the individual thinking of a sole executive, and that it is the best means of doing the thinking and deciding for the entire mass of citizens. Particularly in the formulation of school plans and policies, the carefully selected group of a school board is the surest means of finding the right solution of the endless variety of problems for which there is no one definite and final answer.

In the successful exercise of its democratic authority the school board may well give some attention to its use of two common techniques of representative group action upon which it has always depended. The oldest of these is discussion, the open and free exchange of opinion under which thinking is so stimulated that the best philosophy of life of the members and their widest experience are brought to bear for the clarification of each school problem. All discussion in a democratic board must make the membership aware of the differences of opinion and of their underlying reasons. It must be characterized by the greatest tolerance of the individual, by a tenacious seeking for the full truth, and by a desire to change opinion by willing acquiescence in sound principle and wise conclusion. It is always true that "a man convinced against his will is of the same opinion still."

The best studies of the efficiency of school boards in solving social and educational problems point to the fact that board members are in the vast majority of cases not adversely affected by their wealth, position, or other background which might militate against the social welfare of the entire community or of the pupils.

A second common technique has been the use of professional advice and advisers. The development of the superintendency as the source of technical information on education and of advice on needed procedures in handling problems of organization and of instruction, finance and buildings, selection of teachers, etc., is a natural outcome of the practice of the

earliest New England school committees to use the minister and the schoolmaster as their advisers. It is a commonplace to say that the superintendent's success depends largely on his ability to inform the school board and to lead its members in agreeing with his opinions and his proposals. Skill in the use of discussion as a means of democratic administration ranks very high in the superintendent's success.

Insistence on the full use of discussion is finally the top-ranking duty of the school-board president.

FOR A BETTER OFFICE OF EDUCATION

THE proposal of Commissioner J. W. Studebaker for the improvement of the services of the U. S. Office of Education offers an opportunity for enthusiastic support of a federal project in which all factors in American education can cooperate. The plan recommends the expansion of eight divisions for better service to (1) local school administration; (2) local and state school auxiliary services; (3) federal statistical information, and publication services; (4) international educational cooperation; (5) elementary education; (6) secondary education; (7) vocational education; (8) higher general and professional education. Of the eight existing divisions, the vocational and trade education group has made notable progress because it has been quite fully staffed and has had a definite commission to render a needed service. Similar services would be possible under a logical rearrangement of the remaining divisions and a restaffing with thoroughly competent men and women.

School-board members will understand better the need for the reorganization and expansion of the Office when it is said that in the single field of school administration practically no current information can be had at present to help solve problems of school finance, school purchasing, general business management, nonteaching personnel management, teachers' salaries, etc. In practically all other fields there is a similar lack of help.

In the publication of statistics, studies of current trends, directories, and general bulletins of information the Office is constantly hampered by its own lack of staff and inability to get prompt printing services. Some of its best efforts have been practically nullified by these difficulties.

Even if the Office receives only a small part of the added personnel asked by Mr. Studebaker, the glimpse of the possible reorganization will build in Washington some respect for education which the other governmental agencies have never shown.

SCHOOL-PLANT RECONDITIONING

THE middle of April should witness the completion of plans for school-plant reconditioning to be realized during the vacation season. There has been much loose thinking in recent years concerning the responsibility for maintaining the school plant at a high level of physical and economic efficiency. One group has held that any program of repair and maintenance is futile unless a given percentage of the original plant cost is spent annually. These men have been inclined to hold school-board members to scorn when the question of actual necessity has been raised. Another group have been minimists and have frankly held to the notion that nothing should be done unless an actual mechanical breakdown has occurred, unless roofs and rain gutters have sprung leaks, unless health and safety officers have ordered replacements of sanitary fixtures or electric wiring. These economically minded board members and their business staffs have never heard of "a stitch in time" but are willing to waste large amounts because they have deferred repairs.

War or no war, school repairs and replacements must be made when and where needed. The federal regulations recognize schools as essential to the continuation of a sound civilian economy, and the school-business executive who is alert and genuinely earnest about school maintenance can find all the materials and the labor needed to prevent loss and damage to school property. He can, in fact, find materials and services that will distinctly raise the quality of schoolroom lighting, better the sanitary facilities, improve the safety precautions, and insure the useful beauty of school interiors. It is largely a matter of dropping preconceived notions, of digging about in the available markets, of rewriting specifications, of finding new things — all hard work with the long-range efficiency of the schools in mind. An old-fashioned checkup of grounds, of building interiors and exteriors, of service systems, and of teaching equipment is a good starting point. The spring and summer are busy seasons for school boards and their executives.

HEALTH TESTS OF SCHOOL EMPLOYEES

HEALTH tests of school employees have taken on new aspects that deserve the consideration of school boards. Undertaken originally with reluctance as a means of preventing children from being exposed to tubercular and other germ carriers, the

physical examinations now include as a minimum the testing of heart, of eyes and ears, and perhaps a vague reference to nerves and general physical vigor. Much of the attention is limited to the time of first employment or admittance to the retirement-fund plan. Community health authorities and pension executives are still the most active proponents of more complete and frequent health tests for the school staffs.

As a war expediency, complete, annual medical examinations of all teachers and executives are fully warranted. The preventive measures suggested by timely examinations may prevent crackups of teachers who are hard to replace; they may suggest adjustments of teaching loads and daily programs that will improve both individual and group morale in schools; they may find the cause of tensions in entire school buildings and of relieving difficult situations.

A universal program of fairly complete health tests will in a few years solve the difficult problem of the aging teacher, or older principal, who because of long and highly successful service has refused to submit herself or himself to a doctor's examination. The school and the children deserve protection against the failing efficiency of such an individual, and there is genuine human sympathy in compulsory easing of the official load in the direction of retirement for the enjoyment of a happy old age. In this matter, proper community sentiment can eliminate sentimentalism and establish sound public policy.

WAR MEMORIALS AND THE SCHOOLS

IN NUMEROUS communities, the question has arisen as to a suitable memorial to the memory of those who are fighting in the defense of the nation. While various civic groups are planning soldiers' and sailors' memorials, the school authorities, too, are not unmindful of the opportunity.

Thus, several boards of education have in mind the construction of high schools, stadiums, auditoriums, gymnasiums, or sports fields, to be considered as soldiers' and sailors' memorials. Others have in mind bronze statues, busts, or paintings, while still others plan memorial halls to house war trophies, and to serve as meeting places for the surviving war heroes.

The extent to which communities may be willing to give expression to their appreciation of the returned servicemen through the school system rests largely upon local sentiment and conditions. While smaller, rather than larger communities, may find in the school the medium for realizing a

memorial, the more pretentious of these projects necessarily become civic enterprises too costly for school funds.

The best suggestions thus far noted indicate that a soldiers' memorial should emphasize the living culture for which the war has been fought. The nearest answer to this thought would be a memorial hall or social center of some type where the memory of departed heroes could be kept alive by a type of service that would strengthen the democratic ideals and improve the way of life of each succeeding generation.

In the small community such a memorial might most appropriately be a dignified auditorium as a part of the community high school so planned that it would serve a wide variety of democratic and patriotic purposes. A well-executed mural and perhaps a few properly encased trophies would be sufficient reminders of the valor of the men of 1941-46. Such a memorial would have a living value far superior to any bronze or marble statues.

HOME RULE AND STATES' RIGHTS

SCHOOL authorities frequently engage in arguments for home rule in school control and urge the value of local interest in education, while at the same time demanding complete state support and federal aid for education. Some of the statements are a bit silly in that they reflect very clearly the unwillingness on the part of the school boards and of professional leaders in the local community to make the sacrifice necessary for providing a balanced and adequate school program. The states are no less guilty of this inconsistency.

A recent editorial in *Municipal Finance* points out the importance of officers of municipal and state governments meeting the problems of local taxation and local support for community enterprises. The editorial applies particularly to schools when it points out very aptly that,

If home rule for local governments means only the right to get along without revenues and without any kind of help from the state, then home rule is an empty fiction of government that concedes the localities have a job to do and are entitled to the money with which to do it. If states' rights and state sovereignty means that the state will accept no responsibility for its localities but will at the same time make it necessary for them to seek federal financial and administrative assistance, then it is time to stop discussing states' rights and state sovereignty and talk about a relationship which is more compatible with the activities which the local governments are actually required to perform. If federal aid is the vehicle for letting the states slide out from under their responsibility and the localities form assuming obligations which they can readily bear, then pious talk about home rule and states' rights should cease and the local governments should admit their only hope lies in looking toward Washington and not toward their state capitals.

The home rule issue gets greatly confused be-

cause local government officials get together and talk about home rule as if it were their most cherished possession. Then they go home and do nothing to solve their local problems; they frequently fail to place their case properly before the state legislature, and the solution to local problems is sought through federal financial aid instead of through more complete use of state and local resources. This attitude somewhat bewilders Congress and the state legislatures. The local governments can't seem to decide whether they want state grants, federal grants, or a completely autonomous local revenue system.

To some state officials home rule seems to mean that the cities are privileged to go without money which they might have had if the state itself had not acted unwisely in cutting off local revenues. What an empty honor! Frequently the excuse given by the states lies in the inadequacy of state constitutions. But state constitutions can be amended and that should be done where necessary to provide adequate local finances.

There is still a place in the United States for a philosophy of home rule and the practice of state responsibility. Home rule should mean the right of the localities to determine local matters within the scope of general acts passed by the state legislature. The citizens of a locality are also citizens of the state, and the state cannot shirk its responsibility for providing adequate local revenues merely by saying that the state needs the money for its own use, or that it has no constitutional power to share with the localities. Constitutions, both federal and state, were made to preserve the rights of individual citizens, and they were not intended to be the primary obstacle to the meeting of human needs. Rather, they were intended originally to guarantee freedom and equal opportunity for all citizens.

Let's go straight on this question. The local governments should have the revenues or the authority necessary to finance the activities that are imposed on them. They cannot appropriately ask the state or federal governments to give them money until they have made an honest effort to raise local revenues in a reasonable way and at reasonable rates. Meanwhile the states should grant necessary fiscal authority to the localities; the states should share certain types of revenues; and the states should not take away, by constitution or statute, the means by which local governments can finance desirable and necessary activities. Finally, when the localities have made the best use of their resources and the states have given localities both authority and money, then the Federal Government may appropriately participate in state and local financing provided there is a national issue involved and that federal acts do not stimulate or require unreasonable local or state expenditures.

The phases of home rule discussed above are not popular with some school boards, but they deserve to be seriously considered before the state and the federal government are criticized for not doing more for the schools.

IS IT TRUE?

When your correspondent states that the parent is so often treated as the teacher's greatest enemy, he is not exaggerating. There was far more cooperation between parents and teachers thirty years ago than there is now. Certain types of teachers seem to glory in aloofness and isolation and from their self-erected barriers shoot their irritating little peas at parents. The barriers are not so much in evidence in rural areas, but they are high and formidable in many of the built-up urban districts where schools are staffed mainly by teachers who have no roots, and very little interest, in the community from which the children entrusted to them for five to seven hours a day are drawn.—Letter in (London) *Times*, *Educational Supplement*.

School Boards to Conduct "Psychological Warfare" Against Tax-Objecting Railroads

Herbert B. Mulford¹

Railroads which make up the greatest network of rail communications in the world around Chicago are thoroughly "in dutch" with the public schools of their areas. This is all because these big corporations, acting wholly impersonally to object to every possible technicality which might nullify part of a school tax rate, are depriving the public schools of millions of dollars in the aggregate of school taxes already collected but impounded until the railroad lawyers wave the magic wand to let the teachers be paid.

For several years, the present writer has, at intervals, described in the Journal the plight of the local school governments due to these practices which are so profitable to the roads and to their tax specializing attorneys. Here and there small groups of school boards, joining with boards of villages, cities and park districts, have taken up cudgels to fight back for their individual taxes. But the problem became so serious that such minor action could not suffice. Then, by chance, a few months ago the school boards, through their association, stumbled upon a device which they brought forward on March 1 at a mass meeting of boards and superintendents from all the suburbs in Cook County, which immediately surround the city of Chicago.

To get the background one should understand that the railroads are justly very proud of their great contribution to the war effort. School people, in common with all others, concede this. The railroads, like many other corporations, wish to capitalize on this effort through carefully organized public relations which include much newspaper and magazine advertizing and radio programs, but also most importantly in this situation, a whole series of pictures and pamphlets specifically created to reach teachers and pupils of the public schools. For instance, one such pamphlet is entitled "Manual for Teachers"; another is "Quiz," and so on.

Here the school boards found the vulnerable "Achilles heel" in railroad public relations. It promised several possibilities. On the one hand, it indicated that the railroad management's right hand did not know what its left was doing. On the other, it showed up very pointedly the rail managers who, when memorialized by interested suburban groups to do something about the frivolous and capricious acts of the tax lawyers, had impersonally "passed the buck" by saying that the railroads simply were objecting to those taxes which they considered illegal. But that was not half the story.

¹Wilmette, Ill.

At the mass meeting mentioned, school board data were brought forth to show that there were more than a dozen standard objections of the most frivolous character which were used largely as a dragnet to catch the unwary board which had not been accurate technically in making budgets and filing tax levies. Over and over again, these objections had been ruled out by the courts.

When such tax objections are filed, the county tax collector under advice of his own attorney, automatically withholds whatever percentage (sometimes 2.5 per cent) of collected taxes he thinks might be invalidated. If he did not do this and the court upheld any objections, the collector could easily be

held liable for the recovery of taxes paid to him but thus invalidated.

The complaining school officials said that as long as this practice did not run into large figures, they took the inconvenience "all in the day's work" and waited for slow court action to wash out the difficulties. But when they began to discover that as much as \$50,000 at a time was impounded from taxes already collected for a single board, they began to protest. They gave a long series of stories about cooling their heels at the offices of the special tax lawyers and the several county officials with scant success. Eventually they found that the county collector released such moneys whenever the tax lawyers said they had withdrawn their objections.

Then the school boards began to call the whole procedure harsh names. This was largely because the tax lawyers would not cooperate in telling the school officials of the type of taxes to which they objected; also because it largely was impossible to get any prompt action from county officials to inform the boards of the details of the tax objections and because the tax lawyers were known to be

(Concluded on page 54)



The wartime general nursing class at the New Braunfels, Texas, high school is a happy, active group.

War is not without some benefits. At the New Braunfels High School, New Braunfels, Tex., the war emergency inspired the school staff headed by Supt. E. A. Sahm to establish a wartime general nursing class as a part of the school war emergency program. The class has been enormously successful and is now in its second year of operation.

The course provides the fundamentals of home and general nursing, is intended to help girls serve as nurses' aides and, as a further educational purpose, to provide educational and vocational guidance. The course is open

to any senior girl 16 years of age or over.

All of the instruction is given by the school nurse. While home nursing is stressed, much training is given in sickroom and hospital technique. Included in the course are dietetics, preparing and reading of patients' charts, administration of medicine and hypodermics, care of the injured and surgical cases, and bedside nursing. Observation in local hospitals is part of the course. The work has proved generally popular and will be continued after the war as a regular part of the vocational curriculum.

Brilliant Illumination WITH THE RCA PROJECTOR

Efficient projection performance is assured in classroom, assembly hall and school auditorium because the light system is correctly engineered.

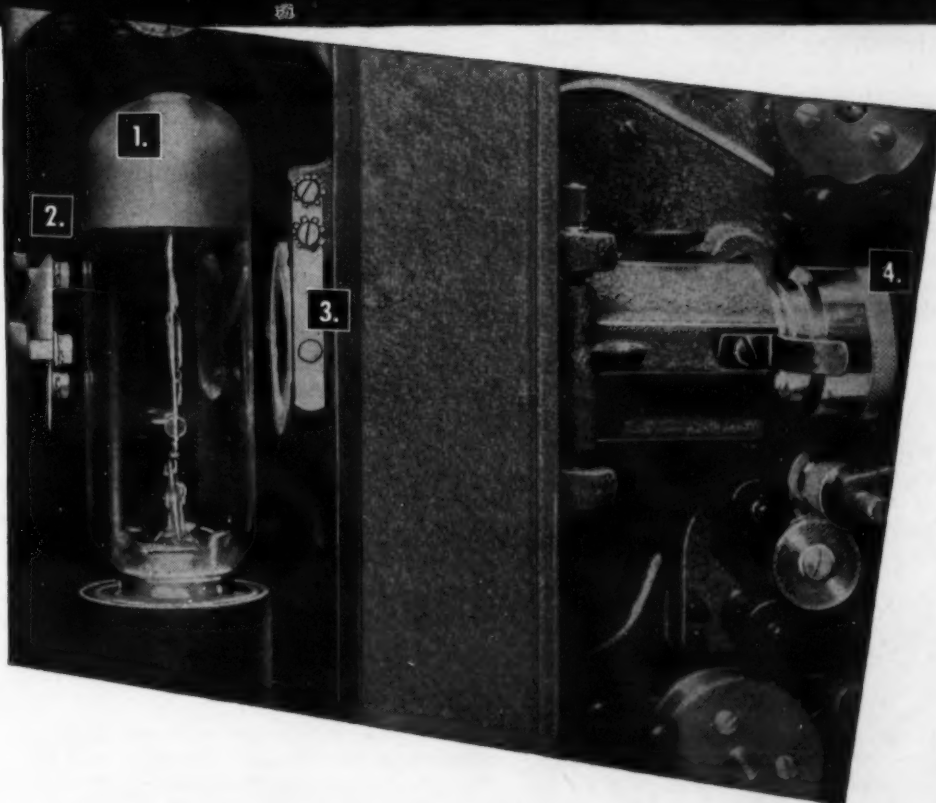
Read how RCA Projectors provide better illumination:

1. Any standard 750- or 1000-watt Lamp with medium pefocus base can be used.

2. The precision-built RCA Reflector is made from heat-resistant pyrex glass that has a silver coating. A properly designed reflector redirects 30% to 45% of the light, which would otherwise be lost.

3. A large two-element Condenser Lens with one element "aspheric" to produce more uniform illumination at the screen.

4. A fast two-inch F1.65 Projection Lens is standard equipment. All air-glass surfaces are coated, increasing picture brilliance and contrast.



Other features: The new RCA 16MM projector will include other important advances in projector design, such as even-tension take-up; simplified film path for easy threading; completely removable gate; amplifier with inverse feedback for true sound; rewind without changing reels; standard tubes and lamps; sound stabilizer to keep sound on pitch; aero-dynamic cool-

ing to prevent hot spots; lower film-loop adjustable while in operation; theatrical framing.

Availability: Because of military demands, these new RCA projectors are not available now for civilian use. But investigate the new RCA projector before you plan postwar purchases for your school. Write: Educational Department 43-24C, RCA Victor Division, Radio Corporation of America, Camden, N. J.



RADIO CORPORATION OF AMERICA

LEADS THE WAY... In Radio... Television... Tubes...
Phonographs... Records... Electronics

43-6136-24

(Concluded from page 52)

getting rich from this very lucrative business. Obviously there were enough illegalities in school practices to net the railroads good returns or they would not retain lawyers to use such dragnet tactics.

Now the school boards of Illinois promise to fight fire with fire. At the meeting of March 1 the whole situation was explained in the presence, not only of county but of state officials. Three resolutions were unanimously approved for immediate "psychological warfare" on the railroad. In addition to individual action by given boards to protect themselves and to recover their legally levied and collected but objected taxes, there is to be an effective campaign of publicity directed first at the railroad managers who are spending so much money to propagandize teachers and pupils. Next, if that does not stop the reckless type of legal objections, the campaign is to go to the teachers, who can just as readily tell the pupils what "the bad railroads are doing to stop your education" as they can relate the great prowess and accomplishments of the roads.

Several pounds of railroad propaganda were displayed on a bulletin board at the meeting. Incidentally, although the particular boards which were called to the mass meeting were from only Cook County, which is the worst tax-entangled school area in the country, the officials who ran or attended the meeting came from all over the state with their testimony of board fiscal problems. Thus, the planned action may easily spread to all Illinois schools. But school officials throughout the nation can very easily watch this action to determine whether here is a pattern which can be used effectively elsewhere.

The Qualities of a School-Board Member

Mr. G. W. F. Brisbin, Acting Chief Administrative Officer of the Province of Manitoba, Canada, suggests that members of school boards must possess seven personal qualities which will especially fit them for work as trustees of school districts. He writes:

"The challenge facing each and every individual associated with the educational life of the community is greater today . . . under the cloud of war, than ever before. Upon no one group is this challenge greater than upon that largest body of unpaid servants . . . the school trustees. It is a well known truth that the citizens of tomorrow are the product of the schools of today, and it is no less true that the schools of today and therefore the resulting product are determined in large measure by the school boards. From this statement it follows that one, if not the most important service rendered in any community is that of a good school board member. The position requires wisdom, patience, common sense, and above all devotion to the most worthwhile of all causes. As one writer states, 'School boards have under their direction the most important, the most technical, and most difficult public business. Besides, more money is spent on the

There were several side lights on this meeting. To several research students present studying school-board administrative action it became very obvious that here at least were examples of the greatly broadened field of school-board responsibilities over and above the traditional view held by professional commentators that the school board is merely a legislative body to establish school policies. Throughout the testimony one could observe that this was administrative work which superintendents could not do without endangering themselves to possible reprisals.

Again it was obvious that in the present state of confusion of school laws and revenue practices, not only in Illinois but throughout the country, the individual school system constantly is running up against problems which the duly elected political county and state officials do not or cannot solve promptly enough to protect even legally levied taxes. This obviously has called for the organization of regional or state associations of school boards.

To the present writer at least, the proceedings meant that multifarious responsibilities of school-board members working under these conditions are forcing new evaluations of the school board as an American institution. While many individual school-board members almost petulantly assert that they never expected their uncompensated civic obligations to embrace such difficulties, the steadfast leadership of those laymen who are fighting for the schools are developing something within the school board of which the average professional commentator and research man is totally in the dark. For want of a better term this may be called "the maturation of the school board."

schools, more people are employed in them, and more people are affected by them than any other local and public undertaking.' The foregoing being a truthful and awakening statement, is it not fitting that we give thought to qualifications of those elected to trusteeship



and that the trustee once elected devote some time to self-analysis with a view to bringing himself or herself into line with the qualifications necessary to the fulfilment of the office bestowed. What are some of these qualifications?

"Competency"—Because efficient administration of schools is a complex and technical business, it is imperative that a school board member be one who has exhibited competency in his or her own field of endeavor and therefore be reasonably expected to be competent to administer school district affairs.

"Unselfishness"—School-district business is community business—therefore any board member who accepts a position on the school board with a view to promoting only those things which will bring personal advantage or advantage to his friends, can do inestimable harm to the cause of education generally and more specifically to that all important product which the school is capable of producing.

"Be Well Informed"—The success which attends the efforts of the businessman, the farmer, the professional man, depends to no small measure upon the degree to which he has kept himself informed on everything which is directly and indirectly related to the enterprise with which he is connected. Acquaint yourself thoroughly with your own school system and visit as many others as opportunity will allow—not all the good eggs are in one basket.

"Honesty, Fairness, Good Judgment"—These qualities are necessary to the success of any business—and are all the more so in the administration of the most important enterprise in any community—large or small.

"Co-operativeness"—Education above all else is not a one man job. It requires the best that all have to offer and this can only be attained through the highest degree of co-operation between the board as a unit and the community which it serves.

"Willingness to Accept Responsibility"—The responsibilities evolving upon school-board members are many and varied. One person is only capable of doing so much as an individual. This means that various tasks must of necessity be assigned to individual members, or in case of larger boards, groups of individuals. The acceptance of this responsibility accompanied by earnest effort to complete the work assigned will go far toward the efficiency of the work of the board as a whole.

"Faith in the Cause"—Last and by no means least is the faith which the individual board member has in the cause of education. No salesman can sell a product unless he has first of all sold himself on the worth of the product.

"The above has by no means exhausted the list of qualifications which should be inherent in a person holding or about to hold school-board membership, but does, we feel, express some of those qualifications which are fundamental. Being human beings and possessing the frailties which we do the conscientious board member or 'member to be' will feel that he would desire some of these qualifications in greater measure, if what he feels should be taken into this all important office is to be taken into it. In concluding therefore is it not fair to state that practically all of these qualifications can be possessed by the board member present or future if he is possessed with the true desire to acquire them?"

Just what the Doctor ordered...



It wasn't rheumatism;
Her diet was O.K.
But still the patient suffered,
Complaining more each day.



She scowled at all her fam'ly;
She argued with her beau
She really couldn't help it...
Her fingers hurt her so.



Her working days seemed endless.
Each letter was a chore.
Until one day she blurted,
"I can't type any more!"



They took her to the doctor,
Who smiled and shook his head.
He said, "Cheer up, young lady;
I'm sure you're far from dead.

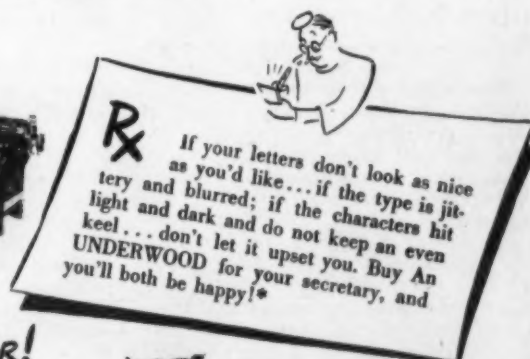
"Look, Boss," the doctor whispered,
"This really is a shame.
The girl is quite unhappy,
And you're the one to blame.



"She just can't keep on pounding
Her machine is her disease
Just give her one with 'Velvet Touch'
And light, responsive keys."



He wrote out his prescription:
"It's time you understood.
There's one cure for this patient...
A Brand New Underwood!"



UNDERWOOD... WRITES A LETTER... BETTER!

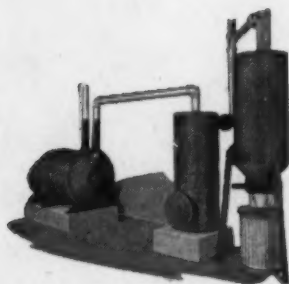
Copyright 1945, Underwood Elliott Fisher Company

UNDERWOOD ELLIOTT FISHER COMPANY, One Park Avenue, New York 16, N. Y.

*Underwood Typewriters are available now subject to War Production Board regulations.



"PAY DIRT" IN SCHOOLS



The vacuum producer and dirt container are located in the basement. Piping connects to convenient inlets all over the building.

Dirt and dust can be very expensive if not promptly removed. It endangers health, destroys books, decorations and equipment and lowers the morale of the students.

The real "Pay dirt" is that extra ounce or pound that is extracted every day with the Spencer Central Cleaning System.

It saves time, gets more of the dirt, and because it lasts a lifetime with low maintenance, it costs less in the long run.

Also cleans chalk trays, gymnasiums, radiators, boilers, filters, projectors and a dozen other hard-to-clean spots quickly and easily.

Leading architects and educators endorse it. Ask for the Bulletins.

SPENCER VACUUM
HARTFORD
CLEANING
THE SPENCER TURBINE COMPANY, HARTFORD 6, CONN.

School Law

Schools and School Districts

Under the Texas statute, a county board of education has broad powers in consolidating and changing districts and in transferring children from one subdistrict to another, and in doing so may exercise a liberal discretion, but such powers may not be exercised arbitrarily. KRS 160.070. — *Alford v. Board of Education of Campbell County*, 184 Southwestern reporter 2d 207, Tex. Civ. App.

Under the Texas statute, authorizing consolidation of "any" rural high school district already formed with "any" contiguous common school districts uses "any" in a plural sense and authorizes consolidation of contiguous rural high school

district and common school districts regardless of whether they are separated by a county line. Vernon's annotated civil statutes, arts. 2806, 2922a, 2922aa, 2922c; Vernon's annotated state constitution, art. 7, § 3. — *Doherty v. King*, 183 Southwestern reporter 2d 1004, Tex. Civ. App.

School-District Government

Where the school directors had awarded a contract for the purchase of stokers to one who was not the lowest bidder, and checks in payment of the stokers were given before the stokers were received and after the beginning of the term for which one of the directors had been elected, such director's failure to find out what was going on constituted a dereliction of duty committed during his elective term and justified his removal. 24 P.S. §§ 180, 763; P.S. constitution, art. 6 § 4. — *Com. v. Fahey*, 40 Atl. 167, Pa. Super.

School-District Property

A Kentucky board of education can ratify any contract it can make, but such ratification must be made in the same manner and with the same formality that is required to bind the board and must be unequivocal in character. R.S. 162.070. — *Goin v. Board of Education*, City of Frankfort, 183 Southwestern reporter 2d 819, 298 Ky. 645.

Taxation

The refunding bonds of an Illinois school district are to be retired by a tax rate separate from the building rate. Ill. revised statutes of 1937, c. 24, §§ 662.1 to 662.8; Smith-Hurd statutes, c. 122, § 212. — *People ex rel. Oller v. Missouri Pac. R. Co.*, 58 Northeastern reporter 2d 47, 388 Ill. 271, Ill.

A township or school district auditor's report surcharging the tax collector from which no appeal has been taken is conclusive, in the absence of fraud, though erroneous, as it can be challenged only in the manner provided by the Pennsylvania statute. 24 P. S. § 2253. — *In re Auditors' Report of School Dist. of Hempfield Tp., Westmoreland County*, 39 Atlantic reporter 2d 919, 351 Pa. 1.

Teachers

Under the New Mexico "Act Relating to the Employment and Discharge of and Contracts With Teachers in the Public Schools, etc.," the word *teachers* covers those who are certified as qualified to teach and who are employed in the schoolwork. 1941 N. Mex. complete laws, §§ 55-1111 to 55-1113. — *Ortega v. Otero*, 154 Pacific reporter 2d 252, N. Mex.

Where the Florida statute imposed on a public school teacher the duty of teaching students, by precept and example, honesty and patriotism, the school board was justified in removing as incompetent a teacher who was a conscientious objector opposed to participation in the war and to service either in combat or noncombat forces of the United States. F.S.A. §§ 230.23 (7) (i), 231.09 (1-3). — *State ex rel. Schweitzer v. Turner*, 19 Southern reporter 2d 832, Fla.

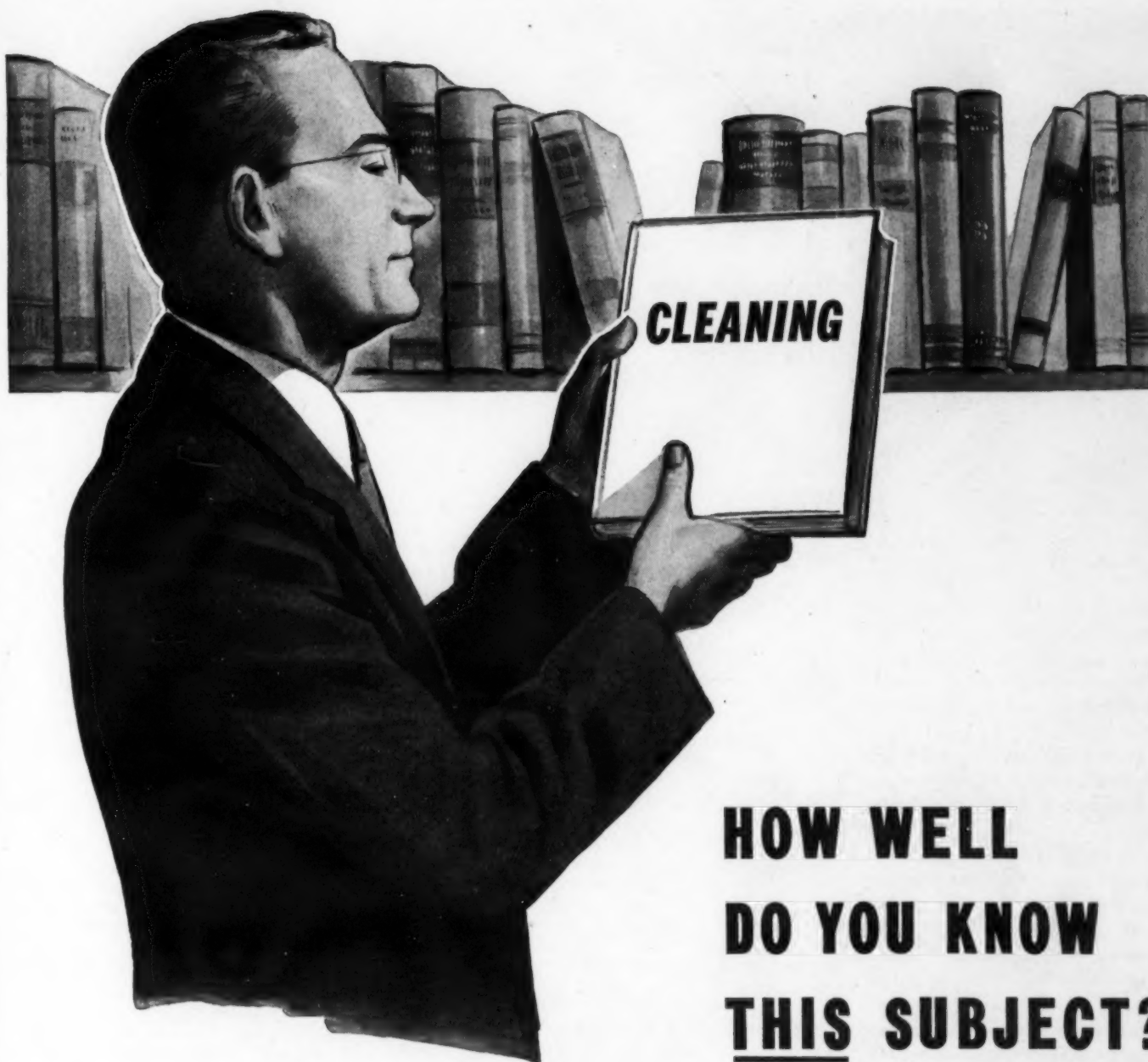
A rural school supervisor is a "teacher" within the New Mexico statute authorizing a discharged teacher to appeal to the State Board of Education, and hence such board could entertain an appeal from a decision of the county board of education discharging such supervisor. 1941 complete laws of New Mexico, 55-807, 55-1111 to 55-1113. — *Ortega v. Otero*, 154 Pacific reporter 2d 252, N. Mex.

Pupils and Conduct of Schools

Under a Kentucky statute, a county board of education has broad powers in consolidating and changing districts and in transferring children from one subdistrict to another, and in doing so may exercise a liberal discretion but such powers may not be exercised arbitrarily. KRS 160.070. — *Alford v. Board of Education of Campbell County*, 184 Southwestern reporter 2d 207, Ky.

Where a school had been closed for purposes of economy and children had been transferred to another school, but the evidence conclusively showed that a bridge and its approaches on the route to such school were extremely dangerous and that a slight mishap at the place would result in precipitating the school bus over an embankment, the public policy demanded that the children should not be subjected to such a hazard, or required to attend such school until the hazard had been eliminated. KRS 160.070. — *Alford v. Board of Education of Campbell County*, 184 Southwestern reporter 2d 207, Ky.

The purpose of an Iowa statute requiring a school board to arrange for transportation of children enrolled in an elementary school other than in a consolidated district living two and one-half miles or more from school is to afford children living two and one-half miles or more from school substantially the same educational advantages as those living nearer. Iowa code of 1939, § 4233.4. — *Flowers v. Independent School Dist. of Tama*, 16 Northwestern reporter 2d 570, Iowa.



HOW WELL DO YOU KNOW THIS SUBJECT?

It's not a simple one, as you'll find if you investigate the problems of maintenance and culinary cleaning in your institution. But there's specialized help at hand—in Wyandotte Cleaners.

Wyandotte Detergent is an effective cleaner for *any* surface on which water is used—paint, porcelain, floors. It rinses freely and leaves no slippery film or residue.

Wyandotte F-100* is an *all-soluble* cleaner particularly adapted to wood floors. Not a speck of white deposit is left after mopping or scrubbing with

*Registered trade-mark

this Wyandotte product. Use for removing heel marks or dewaxing floors.

For dishwashing by machine, turn to Wyandotte Keego.* It works quickly and efficiently in hard water or soft. Then it rinses freely.

Wyandotte H. D. C.* is for washing dishes by hand. Sudsy and containing soap, it's a superior water-softener and grease-remover.

For advice on any cleaning problem, call on the Wyandotte Representative. No obligation.

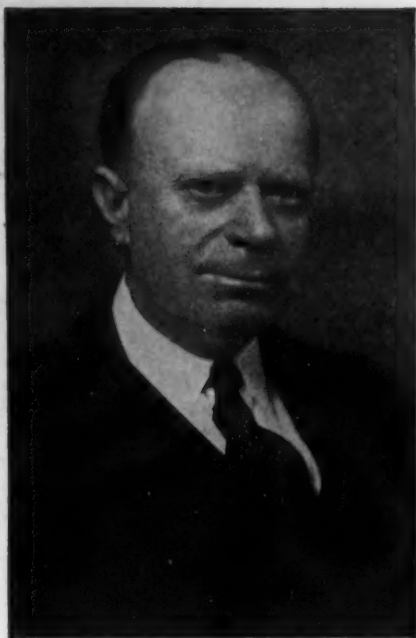
WYANDOTTE CHEMICALS CORPORATION • J. B. Ford Division • Wyandotte, Michigan

SERVICE REPRESENTATIVES IN 88 CITIES



Wyandotte

REG. U. S. PAT. OFF.



Edward E. Ashley, Consulting Engineer, New York, N. Y. Member of ASME, ASH&VE, and AIEE.

"In school heating, the different occupancy requirements of classrooms, study halls, dormitories, gymnasiums and other sections—and often varying temperatures dictated by use—present problems that call for control (1) at the source and (2) at the several zones," writes Edward E. Ashley. "Moderate, closely-regulated steam heat solves these problems and, at the same time, provides highly efficient operation and greatest comfort . . . Steam is the accepted medium for school heating—because it is flexible; because it can be more perfectly balanced than any other media; and because it can be accurately controlled . . . When War Economy puts the emphasis on Fuel Conservation, the Heating Industry emphasizes Control."

Following are some of the schools for which Edward E. Ashley has specified Webster Systems of Steam Heating: Lincoln School for Teachers' College, New York, N. Y.; Albany High School, Albany, N. Y.; Eastview Junior High School, White Plains, N. Y.; Battle Hill Junior High School, White Plains, N. Y.; Junior High School, New Rochelle, N. Y.; Glenfield School, Montclair, N. J.; Columbus High School, Columbus, Ga.; Cypress St. School, Greensboro, N. C.

Address Dept. AS-4

WARREN WEBSTER & CO., Camden, N. J.
Pioneers of the Vacuum System of Steam Heating: Est. 1888
Representatives in Principal U. S. and Canadian Cities
Darling Bros. Ltd., Manufacturers & Licensees for Canada

**STEAM Heats
America . . .**

School Administration in Action

ST. JOSEPH ADOPTS RATING PLAN FOR TEACHERS

E. F. Garvey¹

Like many other school districts, the school district of St. Joseph, Mo., until recently had what was known as a teacher-rating card. This card contained many of the familiar categories which are found on similar rating plans in use elsewhere. These ratings formerly were made entirely by the principal of the school.

Upon the recommendation of Supt. G. L. Blackwell, the board of education approved a new plan of placing the rating card in the hands of the teachers. In his report to the board, Superintendent Blackwell explained that at best the ratings were arrived at in a subjective manner. "Any subjective value," he said, "whether placed on rating cards or on test papers, is always questionable. Human beings can easily err in their judgment of the qualities of other individuals. Some record must be maintained which will give the administrative officer a history of the progress or nonprogress of a teacher, as the case may be. Recent trends show that some districts have found it more expedient to place the rating card in the hands of the teachers for the purpose of rating themselves. In forming opinions of their instructional work, teachers as a whole are rather conservative. They appear willing to admit weaknesses in their teaching qualities.

"After the teacher has rated herself, the card is filed in the principal's office. It is suggested that the teacher and the principal go over the rating together so that some plan for the improvement of the teacher can be made. This gives both the teacher and the principal an opportunity to work cooperatively for the improvement of the teacher in the instructional program."

No doubt members of the board will raise the question of how the administration will be able to determine the qualifications of the teaching staff without some type of rating system. During the past year circumstances have brought forward a plan which undoubtedly will prove more beneficial for the purpose of establishing a record of teacher qualifications. I think it will be found satisfactory that a detail report be made, as needed during the year, for the improvement of any members of the instructional staff. These reports are made after conferences are held with the teacher. In the future, when conferences are held and agreements made, a copy of the agreement will be filed with the superintendent, one copy to remain in the principal's office, and one to be given to the teacher. In this way, the difficulty of trying to remember what took place at a particular conference will be eliminated. It is a far better means of rating a teacher than to wait until the end of the year, when little can be done about her situation.

It is suggested that a recommendation be made by principals of (a) all those who are to be re-employed, (b) those who are to be transferred, and (c) those who will not be recommended for re-employment. In the last-

mentioned cases, a detailed report will be filed with the superintendent. It is planned to hold conferences with the principals relative to their recommendations.

Before the plan was recommended to the board for approval, Superintendent Blackwell discussed the matter with both teachers and principals, and found that all were willing to make a recommendation for any change to be made. A group of teachers and principals is now at work studying a new list of qualities in the rating scale, which is intended to give the teacher a better opportunity to compare her teaching qualities with those of an ideal teacher.

A NEW PLAN OF STAFF MEETINGS

Under the direction of Mr. Roger B. Holtz, superintendent of schools of Black River Falls, Wis., an interesting variation in staff meetings has been organized. One general teachers' meeting is held each month. A committee selects each of the topics, one for each meeting. The faculty members voluntarily choose the panel upon which they are to serve. Each panel consists of four or five faculty members, who lead the group in an inspirational period of discussion of topics such as sickness and hospital insurance, curriculum revision, GI Bill of Rights, re-education, etc.

Under the plan, the meetings have generally proved beneficial and have been a source of real research into outstanding educational problems.

PART-TIME EMPLOYMENT OF HIGH SCHOOL STUDENTS

Part-time employment of high school students under school supervision will be studied for its relation to postwar education and employment by the National Child Labor Committee.

Mrs. Gertrude Folks Zimand, general secretary of the Committee, in commenting on the plan recently, said that paid employment of high school students under a plan supervised by the schools, has been the most constructive use of student man power during the war. Due to the plan, school leaving has been reduced, students have received far better training and experience than could be obtained in miscellaneous after-school jobs, and it is even now planned to make it a part of the school curriculum.

The committee has employed Mr. Harold J. Dillon, of the Connecticut State Department of Education, to make the study.

SERVE 180,000 MEALS IN SCHOOLS

The Chicago board of education, in a recent statement, reported that an average of 180,477 meals a day were served in the public schools during January.

Of the total, 69,000 high school lunchroom patrons paid an average of 15½ cents a meal; 21,731 diners in the penny lunchrooms paid an average of 6 cents a meal; 66,187 in the penny lunchrooms serving cold foods paid an average of 1 cent.

New lunchrooms have been opened at the Mason School and at the Waves Barracks on Lake Shore Drive.

NEW YORK ASSISTANT PRINCIPALS SEEK CHANGE IN TITLE

The New York City Association of Assistant to Principal-in-charge, at a recent meeting, asked the board of education to support a legislative measure which would officially prescribe the title of principal junior grade for the heads of small schools. The change in title had been recommended in the Strayer report of the Rapp-Coudert inquiry. The association, in its petition to the board, stated that the present name is misleading, as well as cumbersome, and lacking in dignity.

¹President of the Board of Education, St. Joseph 54, Mo.

School Administration News

EIGHT THOUSAND CHILDREN FED DAILY IN BURBANK

Sales records in the cafeterias of eight elementary and three secondary schools of Burbank, Calif., have shown an average of 8200 transactions daily. Although the cafeterias were established and equipped to handle 33 per cent of the school attendance, today they are feeding close to 90 per cent of the enrollment.

While many school districts have been forced to close school cafeterias because of war conditions, the Burbank schools have maintained their program and have met the federal requirements in ministering to the needs of two day-care child centers. These centers provide breakfast, lunch, and an afternoon snack for the children of working mothers.

The needs of an increased enrollment have been met by establishing a wholesome plate lunch which provides one third of the child's daily dietary needs. The plate lunch offers a hot meal for the school child and meets the requirements of the War Food Administration Type A lunch. The children learn to eat vegetables and salads and a "clean plate club" is in operation. Each child is able to receive a nutritional lunch at the nominal price of 20 cents under the system of central control employed in all of the cafeterias.

The cafeteria system is in charge of a cafeteria supervisor who attends to the details of requisitioning, purchasing, and delivery of food and supplies; accounting and auditing of records; and the employment of personnel.

CONVERSATIONAL SPANISH WILL CONTINUE

Following an experiment in elementary Spanish classes last year, conducted by a group of interested teachers, the San Diego, Calif., schools are continuing classes in conversational Spanish during the current school year. Seven schools have provided the opportunity for elementary pupils to study Spanish through the leadership of members of their own staff. Four schools benefit from instruction by a teacher who travels from school to school.

Suggestions for the teaching of Spanish, prepared and tried out as an experiment at the last summer workshop, have been made available for those engaged in the program. It gives guidance on such practical aspects of the work as suggestions in the use of visual materials, the use of dramatization, and technical daily lesson plans.

SAMPLES AND DESK COPIES OF TEXTBOOKS

As a means of conserving paper and eliminating abuses in the ordering of sample textbooks, Supt. Charles H. Lake, of Cleveland, Ohio, has sent the following memorandum to the principals of all schools.

"In the face of mounting difficulties caused by shortages of paper and other materials and aggravated by a scarcity of man-power and transportation facilities, the publishers of our textbooks have managed to supply our needs in a highly satisfactory manner. We can contribute to the continuance of this desirable state of affairs by recognizing that under our system there is no reason for a teacher to request free samples or desk copies of any textbook. Publishers stand ready to furnish samples upon proper official requests, and desk copies, when required, may be included on regular requisitions to this office. Principals are asked to bring this matter to the attention of teachers."

EXCELSIOR SPRINGS PLAN ONE TO CONSIDER

The schools of Excelsior Springs, Missouri, have a plan of early in spring, before the rural schools are out, of inviting all eighth-grade graduates in the area in for a day, and sending school buses out for them. The guests are divided into small groups, seniors take them on a brief tour of the building; then members of the freshman class take groups to classes with them, so they

Sheldon
... Since 1898

Planning a laboratory is not merely a matter of selecting equipment, but a task that demands a high and specialized type of creative understanding, skill, and long practical experience. Only complete integration of every part, invisible as well as visible, can achieve maximum utility.

SHELDON vocational installations are a matter of public record. What we have done for others is a dependable index of what we can do for you. We'll be happy to work with you.

LABORATORY AND VOCATIONAL Furniture

E. H. SHELDON & COMPANY
MUSKEGON, MICHIGAN

can see how the school works. Of course, a good school lunch breaks into the day.

There is no doubt but that these guests have a good feeling toward the Excelsior Springs schools, and have none of the often shown timidity about starting to high school in town.

C. K. Thompson, superintendent, is planning brief courses for the rural eighth-grade graduates for the month or six weeks after their schools close. As a school promotion and a worth-while community-boosting plan the Excelsior Springs idea has been eminently successful.

PROPOSE ATHLETIC INSURANCE

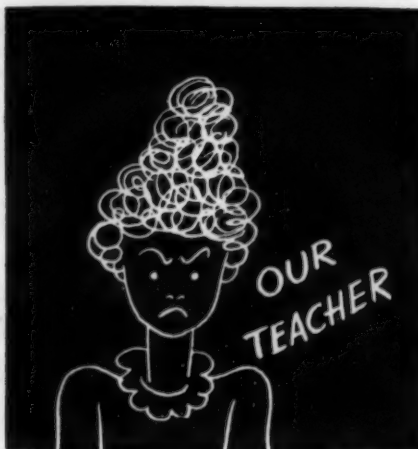
The board of education at Midwest, Wyo., has begun an athletic insurance plan for high school boys. Permission has been obtained to establish the insurance account in the extracurricular account.

Under the plan, players injured in the regular standard practice under the coach's direction and in interscholastic games are eligible to participate in insurance benefits. Benefits will be conferred when written notice has been given the high school office that hospitalization or physician's services have been paid. Parents or guardians must make the financial settlement with the doctor or the hospital.

The amount available for athletic injuries must be indicated at the beginning of each athletic season. If the account is insufficient to meet all benefit payments, the accounts presented for payment will be prorated.

On home games showing a profit, 10 per cent of the net profits will be transferred from the athletic account to the athletic insurance provided there is no deficit. No benefit payments will be made until the end of the football season of 1945.

*Look
who's making
excuses
now!*



You want to know what you could have done, Mr. Superintendent, you could have knocked us over with a feather, yes sir, a feather is what you could have knocked us over with when we heard teacher say there were four reasons why she wasn't using her blackboard.

Don't tell her we told you but these were the four reasons she gave. She said (1) "I can't draw", (2) "My handwriting is pretty bad", (3) "Blackboard work takes too much time," and (4) "Anyway my blackboards aren't much good".

You know what we think? We think reasons (1), (2), and (3) are only excuses (the kind she won't let us get away with) because anybody knows (1) you don't have to be an artist to do things with the blackboard, (2) people who can't write can always print, can't they, and (3) blackboard saves time because anybody can learn faster when he can SEE what the teacher's talking about. We think teacher knows all that.

But, Mr. Superintendent, we wish you'd check on reason (4). If her blackboards REALLY aren't any good, there's something YOU can do about that, isn't there? We mean you can still get Hyloplate Blackboards . . . those Weber Costello folks are still answering their mail. Dept. AMS-45.

WEBER COSTELLO COMPANY

"Specify HYLOPLATE Blackboard—it has no equal"—
available through leading school supply distributors.

Manufacturers

Chicago Heights, Illinois

PROGRESS IN SPENCER, WEST VIRGINIA

The board of education of Roane County, in Spencer, W. Va., has approved a new course of study for the elementary schools in the social studies field. In this course, special emphasis has been placed on human relations, with the individual as the beginning and the ending of the plan. This course is intended to give a broad view of the world today at war and tomorrow at peace.

In Roane County there has recently been planned at Spencer one of the largest school-community canning centers. The building, which is 60 by 80 feet in size, will be devoted to the canning of all products grown in the vicinity, including meats, fruits, and vegetables. Along with the canning under supervision, there will be a complete butchering unit, a freezing unit, a dehydrating unit, a preserving unit, and a curing unit. The canning facilities of the plant will be open to any family in Roane County, and the fee will be the cost of the cans and utilities.

The Roane County board of education is sponsoring the new program so that food will not go to waste in the county.

The schools are doing many other fine things. For instance, they are doing 95 per cent of the collection of all sorts of waste materials such as paper, metal, etc. They are also taking an active part in the sale of war stamps and bonds.

In the recent National War Fund Drive, the schools of the county sold over \$3,000 worth of pies. Pie socials were held in various sections, which resulted in the raising of over \$3,000.

HAMILTON ADOPTS RECREATION PROGRAM

The board of education at Hamilton, Ohio, has adopted a year-round recreation program, arranged by Mr. James W. Grimm, director of recreation. The program is being sponsored by the city recreation commission and the board of education and aims to provide a city-wide summer playground program on school and city play lots. The winter program is being conducted indoors in the school gymnasiums.

Personal News

► R. L. THISTLEWAITE, of Minden, Iowa, has been elected superintendent of schools at Manilla.

► ELMER BURKHARD has been elected superintendent of schools at Rocky Ford, Colo., to succeed G. Kent McCauley. Mr. Burkhard was formerly principal of the high school.

► LEO McDONOUGH has been appointed acting superintendent of schools at Dubuque, Iowa, during the illness of Supt. A. W. Merrill.

► JOHN BULLOCK, of Soldier, Iowa, has been appointed treasurer and business manager of the Huron College at Huron, S. Dak.

► SUPT. E. D. HUMANN, of Oakland, Neb., has been re-elected for another year.

► SUPT. F. H. LARSON, of Randolph, Neb., has been re-elected for the next three years.

► SUPT. DONALD E. MORROW, of Hooper, Neb., has been re-elected for a two-year term.

► DR. S. JOSEPHINE BAKER, first head of the Bureau of Child Hygiene in the New York City Department of Health, died in a New York Hospital on February 26. Dr. Baker joined the Health Department in 1901 and from 1908 to 1923 served as director of the Bureau of Child Hygiene, the first bureau of that kind under governmental control. She was the first woman to receive the degree of public health from Bellevue Medical College, now part of the New York University Medical School.

► SUPT. PAUL M. VINCENT, of Stevens Point, Wis., has been re-elected for a three-year term, with an increase in salary.

► SUPT. H. H. KIRK, of Fargo, N. Dak., has been re-elected for another three-year term, beginning July 1, 1945.

► SUPT. RUSSELL L. TERRY, of Winnfield, La., has been re-elected for another year.

► T. L. NOEL, of Louisiana, Mo., has been elected superintendent of schools at Boonville.

► M. J. WHITSON, assistant superintendent at Topeka, Kans., has been re-elected for the next year.

► P. L. WILSON has been elected superintendent of the Jeff Davis parish schools at Jennings, La.

► VINCENT M. MCCARTIN has been elected superintendent of schools at Lowell, Mass.

► EUGENE MUELLER, 88, a teacher of history and German in the Shortridge High School, Indianapolis, until his retirement in 1933, died February 20. He was the last of a group of five instructors who had given more than forty years of service to the school.

► SUPT. R. G. HEIN, of South Milwaukee, Wis., has been re-elected for a three-year term, with an increase in salary.

► SUPT. IRA F. KING, of Coldwater, Mich., has been re-elected for another year.

► E. A. T. HAPGOOD, of Mount Morris, N. Y., and for some years assistant superintendent of schools at Albany, has accepted a position in the Division of Finance in the State Department of Education at Albany.

During Mr. Hapgood's administration in Mount Morris, many constructive and progressive features were introduced in the local program, including an enriched program from the kindergarten through the senior high school. He was also responsible for the introduction of courses in industrial arts for boys and girls, for club and student activity periods as part of the regular program, and for an improved program of custodial care and maintenance of school property.

► SUPT. FLOYD G. PARKER, of Dannebrog, Neb., has been re-elected for the next year.

► SUPT. PHILIP H. FALK, of Madison, Wis., has been re-elected for a three-year term, beginning July 1.

► PAUL HARDING has been elected superintendent of schools at Butler, Ind., to succeed John Paul Price.

► SUPT. RICHARD HOUSEMAN, of Edmore, Mich., has resigned and will enter Columbia University to complete his professional education.

► MONROE WICKER, of Martin, Ky., has been elected superintendent of schools at Prestonburg.

► SUPT. ROBERT B. WEAVER, of Goshen, Ind., has been re-elected for a five-year term.

► S. S. NISBET, of Fremont, Mich., has been elected superintendent of schools at Holland, to succeed Egbert E. Fell, who is retiring in June.

► SUPT. CHARLES P. HOWELL, of Ponca City, Okla., has been re-elected for his tenth consecutive term.

► GILBERT R. DALE has been elected superintendent of schools at Blue Springs, Mo., to succeed Paul W. West.

► M. M. PETTIGREW has been elected superintendent of schools at Louisiana, Mo., to succeed T. L. Noel.

► GEORGE D. HELTZELL, of Silex, Mo., has been elected superintendent of schools at Paris, to succeed M. M. Pettigrew.

► SUPT. OWEN KING, of Edmond, Okla., has been re-elected for another year.

► SUPT. H. S. BERGER, of Deadwood, S. Dak., has been re-elected for a three-year period.

EDUCATION IS NOT A DESTINATION . . . IT IS A JOURNEY . . . ALWAYS, WE ARE EN ROUTE



Plane People

PICTURED at the left is a group of highly trained specialists, representative of the personnel which is typical of a domestic U.S. airline. At the right are suggested the countless thousands of people, in all walks of life, who have yet to experience their first journey by air.

The importance of Plane People increases in direct ratio to the number of Plain People they are privileged to serve. This is true because the airplane's effectiveness as an instrument for swift domestic and international transportation can be measured only in terms of the number of human beings who utilize what is possible *exclusively* with air transportation.

The value of every invention is determined by *how many* people put it to *what* uses. To assess the significance of the telephone, count the number of subscribers: 20,000,000 in the continental U.S. alone . . .



Plain People

and count the vast number of times people *use* the telephone for all kinds of beneficial purposes.

When *millions* instead of thousands of people have become air travelers, the unprecedented possibilities of air transportation to benefit every phase of life—spiritual, cultural, commercial and political—will become as integral to our existence as air itself.

We earnestly invite your comments, suggestions and questions. Our aim is to assist educators in their study of the meaning of the air age, and to work with them in planning their instruction in the light of its implications. To help do this, we offer "Air Age Education News," a publication devoted to analysis and discussion of the impacts of global air transportation upon civilization, and to specific suggestions for teaching. A free copy is available upon request.

Air-Age Education Research

ADVISORY BOARD

BEN M. CHERRINGTON
Chancellor, University of Denver

EDWIN A. LEE
Dean, School of Education, U. C. L. A.

ALEXANDER J. STODDARD
Philadelphia Superintendent of Schools

DIRECTOR, N. L. ENGELHARDT, JR.

100 EAST 42nd STREET, NEW YORK 17, N. Y.



YOU'VE seen them . . . waxed floors that won't bear washing lest the water remove the wax as well as the dirt. You'll agree such floors waste money because re-waxing, these days, is expensive.

There's no need for concern when you use Neo-Shine on your floors. For the new improved Neo-Shine has a higher water-resisting quality than ordinary quick-drying waxes, due to a new emulsifying agent.

Thus, Neo-Shine shows no white spots from dripping water. Moreover, the rugged Neo-Shine wax film is able to withstand continuous wet-mopping. That's why Neo-Shine is ideal for floors and entrances of buildings where water is tracked in.

Try a beautiful, water-resisting Neo-Shine wax finish on all school floors. It will save not only money and labor, but also fine flooring.

HUNTINGTON LABORATORIES INC

DENVER

HUNTINGTON, INDIANA

TORONTO

NEO-SHINE
WATER-RESISTING • SELF-SHINING • WAX

School Finance and Taxation

SAN ANTONIO CUTS SCHOOL TAXES

A saving of more than \$40,000 for the taxpayers in the San Antonio Independent School District, on the basis of 100 per cent collections, was effected recently when the board of education voted to reduce from 27 to 25 cents the bond interest and sinking-fund tax levy. The 1945-46 budget is now being set up on the basis of 84.5 per cent collections, which would mean that actual savings amount to \$33,873.

On the basis of 84.5 per cent collections, a conservative estimate in the light of 89.9 per cent actual collections of current taxes last year, the sinking-fund levy of 25 cents would bring in \$423,419.78 to be used in making bond maturity and interest payments between April, 1945, and

March 31, 1946. Delinquent tax collections during this period were estimated at \$45,000, and interest on time deposits and payments of the Federal Housing Authority in lieu of taxes at \$4,500, bringing the total estimated receipts for the year to \$472,919.78. The cash balance expected to be on hand April 1 was estimated at \$150,297.19, making a grand total of \$623,216.97.

Actual cash requirements for bond services during this 12-month period will be \$523,725, leaving an estimated cash balance of \$82,555.18 at the close of the year.

A maturity payment of \$50,000, due July 15 this year, will completely retire one bond issue now carried by the schools, reducing by that much the annual maturities to be met. Reduction in interest payments for the year will amount to \$7,835. For these reasons and the conservative estimates in receipts and cash expected to be on hand, it was deemed safe by Bailey Peyton, business manager, and members of the board

to lower by two cents the sinking-fund tax levy for the schools.

MISSOURI SCHOOLS GO FORWARD

The Missouri State Legislature has passed a law, providing a new constitution, which will have the effect of improving the financial status of the schools. By a two thirds' vote of the citizens at an annual school election, patrons may vote sufficient funds for teachers' salaries, for maintenance, and for repairs.

In former years most high school districts were operating "in the red" or close to it, and were trying to hold teachers from outside the state. The teacher shortage is acute and many schools have been forced to close because of lack of teachers and low salaries.

FINANCE AND TAXATION

► Philadelphia, Pa. The school board has approved a report of the committee on finance, calling for a budget of \$32,333,990 for the school year 1945-46. The committee has pointed out that while the budget is balanced, it is neither fundamentally sound nor adequate. It is unsound because it makes no provision for the continuance of the cost-of-living adjustment bonus beyond June 30, 1945, the date beyond which no funds for this purpose are appropriated, and it is unsound because it does not provide any sum for the necessary replacements to the mechanical equipment in the various buildings. It is inadequate because it does not furnish sufficient funds to provide services of the type and character needed for the school system. To provide an educational system adequate for post-war needs the budget should be increased by \$6,000,000, according to the finance committee.

► Lexington, Ky. The school board has adopted a budget of \$737,840 for the school year 1945-46.

♦ St. Louis, Mo. The board of education has lost \$55,000 in the past ten years through failure of bondsmen to pay the amount of forfeited bonds to the Court of Criminal Correction, according to W. M. Susanka, school board auditor.

Bond forfeitures, as well as fines, are allocated by statute to the permanent fund of the board but forfeitures often are not collected because bondsmen are unable or unwilling to pay, or cannot be found. Since 1930, Mr. Susanka, said, the board has received only \$450 in bond forfeiture judgments from the court.

♦ Fredericktown, Mo. The school board recently received a report on the tax assessment in the school district, which shows an average assessment of 26 per cent of the market value. The board has filed a complaint with the State Tax Commission and has asked for a substantial increase in the assessment rate.

BUILDING NEWS

► LaCrosse, Wis. The board of education has begun the formulation of a postwar school-building program to include two new school buildings and additions to existing structures.

► Milwaukee, Wis. The board of school directors has approved recommendations for an extensive and protracted building and sites program as part of the five-year program. The estimated cost of the building program is \$5,795,000.

The committee on buildings has prepared a postwar building maintenance and alteration program, which is to be integrated with the construction program of new buildings and the long-term replacement program of antiquated elementary school buildings.

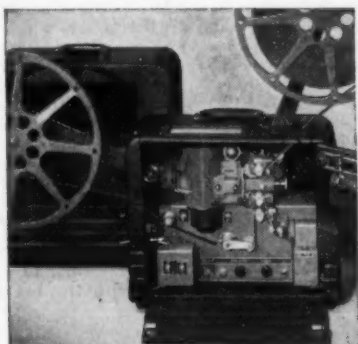
► New Orleans, La. The school board has approved plans for a postwar school-building program to cost approximately \$11,000,000, and to include the construction of gymnasiums in ten high schools and the erection of a Negro high school.

► The school board at Albany, Ga., has begun plans for extensive postwar school-building construction. The program contemplates a Negro high school, a grammar school, a vocational school, and the remodeling of several existing school buildings.

Scene from
"A Fish Is Born"
Classroom Sound Film
No. 5801



Fish Hatch at Your Convenience...with Filmosound



Schools Are Ordering Filmosounds Now

Recent revision of regulations permits schools to place orders for Filmosounds. We will fill school orders in the sequence of their receipt as equipment becomes available. To avoid unnecessary delay, anticipate your needs and order now.

Yes... or butterflies emerge from cocoons. Or ant eggs incubate. Or dozens of other interesting, educational events in Nature Study come to real, thrilling life through the medium of a B&H Filmosound Projector.

No longer do field trips for your classes wait for good days and right seasons. Filmosound brings them into the classroom. Zoology, ichthyology, geology, biology, and other classes in the sciences and arts become more vivid, more inspiring with motion pictures. History becomes more alive.

Geography becomes like a visit.

There are many fine films on almost every conceivable subject in the Filmosound Library. Your school can rent or buy them at very moderate prices.

A Filmosound Projector will reproduce any 16mm. sound-on-film subject at its best. War-accelerated research has made Filmosounds better than ever before.

For additional information send the coupon. Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London. Established 1907.

BUY MORE WAR BONDS

OPTI-ONICS—products combining the sciences of OPTics • electRONics • mechanICS

PRECISION-MADE BY



Bell & Howell

BELL & HOWELL COMPANY
7114 McCormick Road, Chicago 45

Please send information on: () Educational films; () Filmosounds.

School.....

Address.....

City..... State.....

Requested by..... ASBJ 4-45

in stock!! ready to ship

**SERVES
4
STUDENTS**

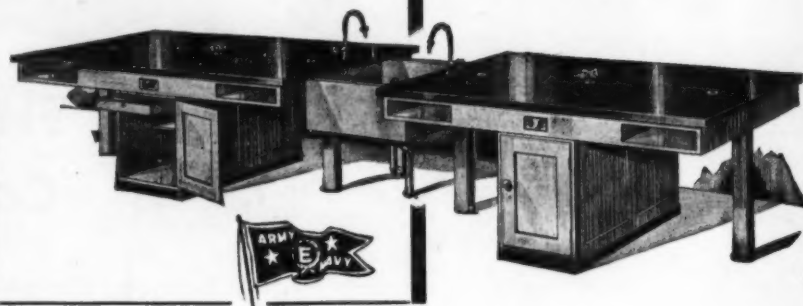
For science laboratory-classrooms . . . Hamilton's All Purpose 4-student table, equipped with service outlets, double cupboards, removable equip-

ment trays and roomy knee-spaces. Four students can work efficiently at this table, either individually or as partners. Or order a combination of two 4-student tables, with soapstone sink in between, to accommodate an 8-student set up for combined science. Ideal where space is a factor!



HAMILTON
MANUFACTURING COMPANY
Two Rivers Wisconsin

**SERVES
8
STUDENTS**



ASBJ-4-45

HAMILTON MANUFACTURING COMPANY
Two Rivers, Wis.

Please send full details on All Purpose Science Equipment.

Name Position

Address

City State

School Board News

THE HOUSTON VISITING-TEACHER PROGRAM

After more than three months' deliberation the Houston, Tex., school board, at their November meeting, approved a visiting-teacher program to begin in February. Superintendent E. E. Oberholtzer was instructed to "hire a co-ordinator to have the rank and salary of a director, and six visiting teachers—four white and two negro—who are qualified for dealing with problems of personal adjustment."

It was emphasized that all those hired should have special training and experience in the visiting field, also that the visiting teacher will be supplementary and complimentary to the classroom teacher. The classroom teacher will have final jurisdiction in any problems of classwork or discipline. No arrangements have been made regarding salaries or financing of the program.

The chairman of the committee which studied the program has explained that it is part of an approach to a dynamic program of education to consider the all-round potentialities of the child, where individual needs and capacities are to be studied and utilized.

"The school must accept its share of the responsibility for fitting our youth for the task which lies ahead," according to the report. It was pointed out that the teacher finds her efforts constantly impaired by emotional and behavior problems in the classroom, and realizes that the child's difficulty often lies in the home, the community, or perhaps in the child itself, and that the co-operation of a trained social worker with both time and skill is needed to discover and alleviate the cause of his trouble.

A plea for the visiting-teacher program was presented to the board by a group of parents, teachers, and welfare workers who recommended that the program be initiated as a means of

curbing the rising tide of juvenile delinquency. It was pointed out that the visiting teacher, trained in psychiatry, can reach beyond the scope of the classroom teacher, and be able to prevent many children from becoming misfits.

Teachers on the committee reported that "we school people daily see many cases of delinquency slipping through our fingers to become the problems of society, yet we have neither the time nor the resources to prevent them."

The board members were of the opinion that the visiting teacher has been accepted as the method of reaching the pre-delinquent child, "and we are not going to solve the problem this year, nor next, and we never will if we don't make a start. It has always been a problem and it will not be solved by any sudden motion—it will take a long time. But now that the people recognize a problem exists it means that we have taken a long step forward."

SCHOOL-BOARD MEMBER RECOGNIZED

President Mary E. Dillon, of the New York City board of education, has recently sent a letter commending a member of the board, Daniel P. Higgins, on his part in preparing a \$125,000,000 postwar school-building program in connection with which 80 school buildings have already been planned.

Mr. Higgins had won a certificate of merit, awarded by the New York Chapter of the American Institute of Architects for outstanding public service.

Miss Dillon's letter reads as follows:

It has been under your leadership as chairman of the Board of Education's committee on buildings and sites that the Bureau of Construction has been reorganized into an efficient school housing unit, that ready-made standardized plans have been replaced by varied designs lending a distinctive personality to each new school planned or built, that these attractive and inspiring buildings are not only exemplars of architectural art and engineering skill but also provide all the facilities needed by our teachers to carry on a well-rounded modern program of education, that it is now possible readily to convert

our buildings from one type of school to another, should the need arise; that wise use of funds available has corrected the sad state of disrepair into which many of our schools had been allowed to fall, and that all this has been achieved with due regard for the city's getting a dollar's value for each dollar invested, the letter read.

New York City is fortunate indeed to have as the guiding spirit behind its vast postwar school construction program of approximately eighty different projects costing more than \$125,000,000 the man whose talents created many nationally known architectural gems.

POSTWAR EDUCATION PROGRAM

Supt. L. W. Feik, of Sioux City, Iowa, has outlined to the board of education, plans for a postwar education program, with the major emphasis on physical fitness.

The physical fitness program would be for girls as well as boys. Also included would be vocational and industrial-arts instruction, with shopwork for the junior high schools, and intensive home-making courses for senior high schools.

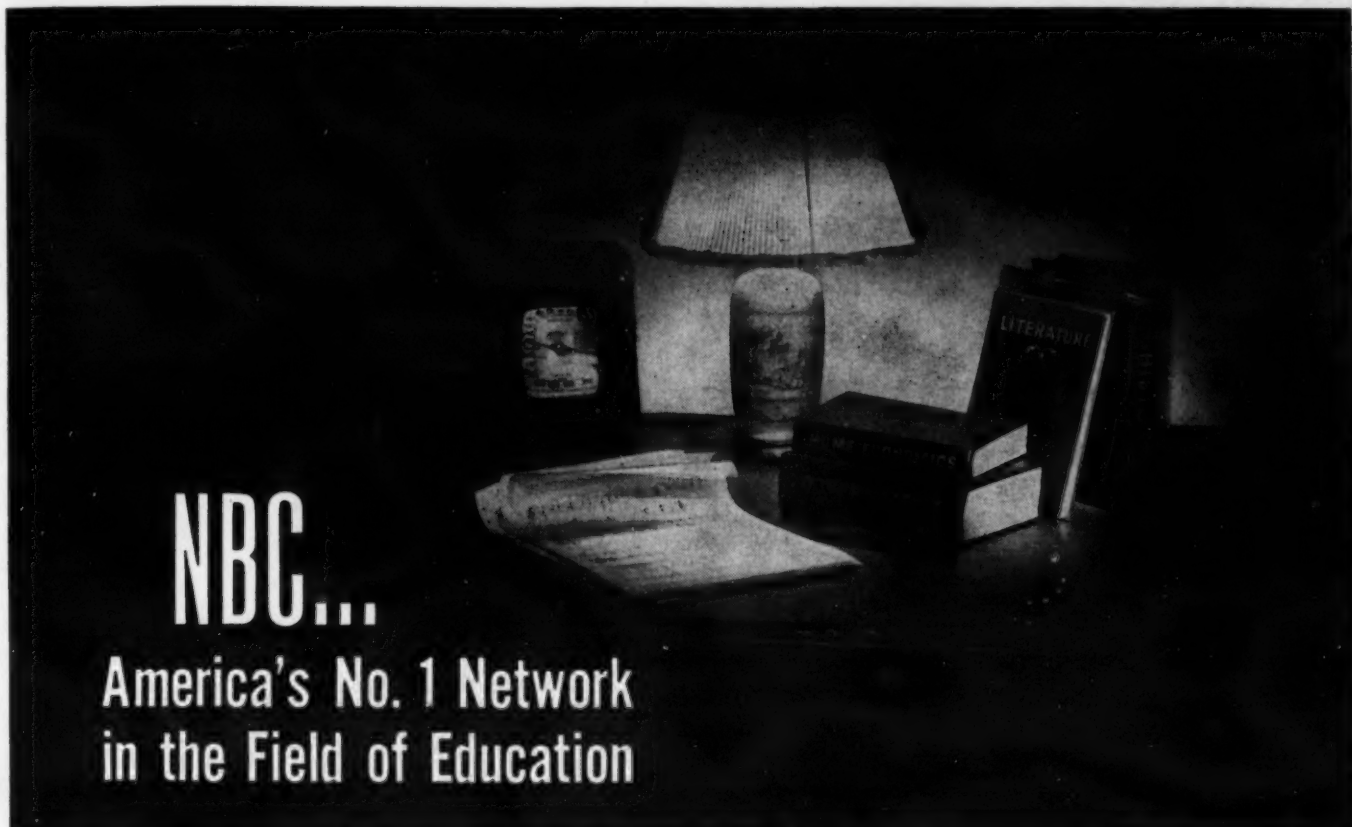
It is planned to offer courses for adult, for postschool youth, and for veteran education.

The use of visual and audio aids, including motion pictures, charts, and globes were pointed out. Provision is to be made for the replacement of equipment and procurement of additional equipment.

Included in the list of suggestions are some building improvements to make the proposed program doubly effective.

INSTALL LIBRARIES IN ELEMENTARY SCHOOLS

Libraries have recently been installed in each of the 14 elementary schools in Hamilton, Ohio. These libraries are being used as important elements in the instructional program. By combining library use with instructional procedure it is hoped to teach the pupils how to choose their reading matter, to stimulate them to read, and to teach them how to read. The enthusiasm of pupils and teachers has attracted help from various sources to supplement an appropriation by the board to start the initial project.



NBC...

**America's No. 1 Network
in the Field of Education**

To the roster of distinguished broadcast courses in Music, History and Literature, established by the NBC University of the Air, have been added an especially significant series in Government, with the title "*Our Foreign Policy*" (Saturdays, 7:00-7:30 p.m. EWT), and a course in Home Economics, "*Home Is What You Make It*" (Saturdays, 9:00-9:30 a.m. EWT).

Once more the National Broadcasting Company has proven its position as America's Number One Network in the field of educational broadcasting.

Nor is that all. NBC also is building constantly for the future. Tomorrow's audiences will reap a

richer reward from their radio listening as a result of NBC's far-sighted policy of aiding listeners to know and use the cultural and educational advantages of radio.

From the Summer Radio Institutes conducted in co-operation with Northwestern University, the University of California at Los Angeles and Stanford University, the Columbia University Extension courses in Radio, the New York City schools radio classes, an ever-lengthening phalanx of teachers and technicians is returning to schools and colleges, helping their pupils to greater appreciation and return from the programs brought to them by their NBC stations.

National Broadcasting Company

America's No. 1 Network

A SERVICE OF RADIO CORPORATION OF AMERICA





**CHAIRS for
BATTLESHIPS**

taught us MORE about

**TUBULAR
FURNITURE**

BUILDING tubular steel chairs for battleships, other warships, and for shore installations, calls for the same accurate, flawless welding that goes into Heywood tubular school furniture!

- We knew more about tubular school furniture before the war than anyone else in the business. We learned even more about tubular steel constructions through our work with troop gliders, Link trainers, engine mounts, and radar equipment!
- Our postwar line of school furniture will justify the faith we have enjoyed these many years in the school field. Heywood will be ready soon after Victory to supply your seating needs quickly and satisfactorily!

HEYWOOD-WAKEFIELD
School Furniture
GARDNER . . . MASSACHUSETTS

NEW BOOKS

High School Extracurriculum Activities

By J. Lloyd Trump. Paper, 210 pages. Price, \$2. The University of Chicago Press, Chicago, Ill.

Extra curriculum activities represent a completely unstandardized area of high school management. While these activities are now encouraged in every school, they vary in status from mere toleration to complete integration with the curriculum.

The present study of management practices is limited to schools in the North Central Association but may be accepted as a rather accurate picture of the situation in public high schools throughout the country. It makes clear that, in a majority of schools, the activities are carried on on the school premises, mainly during the daytime; that they are characterized by active participation of a relatively small proportion of the membership. It is generally a need of the programs that more complete participation of the work of the activity type by all students should be developed.

The management of the activities has been haphazard

in many schools, and broader policymaking work in which students as well as faculty and administrative officials are represented, is advisable.

The average cost in the schools studied was \$5.91 per pupil, of which 44.8 per cent was for nonathletic activities. While the financial support comes largely from private rather than public sources, greater centralization with more stringent procedures are necessary in handling funds, accounting, and reporting.

The study reveals that school authorities generally favor greater work-activity participation of students and more accurate records of student participation. The faculty sponsors generally have an acceptable understanding of their duties, but many of them are in need of in-service training to better acquaint them with the possibilities of a variety of practices in both the athletic and non-athletic activities. The educational values are sometimes lost because of community pressure to produce winning contestants.

The study as a whole is inclusive and well balanced, and a careful reading of its findings and recommendations will help any executive to evaluate his own situation.

McCarthy of Wisconsin

By E. A. Fitzpatrick. Cloth, x-316 pages. Price, \$3.50. Columbia University Press, New York, N. Y.

The first two decades of the present century witnessed far-reaching reforms in the political and governmental life of Wisconsin and the beginnings of that remarkable body of social legislation which has since then swept the nation. Among the leaders of the progressive reform group was a diffident, idealistic, but redheaded, young college professor—Charles McCarthy—to whom the state officials, the social and civic groups, and the then socially and economically disinherited people of the Badger state owe a vast debt. For it was McCarthy who took up where the muckrakers of the day left off, and wheedled and bullied the Wisconsin legislature into accepting his social philosophy, as well as his practical legislative proposals, for the control of public utilities and railroads, for workmen's compensation, continuation and vocational education, university extension, cooperative marketing, and general agricultural advancement. Originator and first librarian of the "bill factory" or pioneer legislative library, he was responsible for the present universally accepted methods of legislative research.

The author of the present work had the good fortune of working with McCarthy during his later years, and has had access to a rich store of personal and private records which are in possession of the Wisconsin State Library and of the McCarthy family. He deserves a debt of gratitude for making widely known the achievements of one of the truly great public servants of the beginning twentieth century.

Growing Up With Numbers (Books 1-3)

Growing Up With Arithmetic (Books 4-5)

By Rose and Ruth Weber. Paper, 96-144 pages, illustrated. 24 cents to 40 cents. The McCormick-Mathers Publishing Co., Wichita, Kans.

These are textbook-workbooks for the first five grades. Book 1, through pictures and activities, familiarizes the beginner with number concepts. Book 2 develops the meaning of addition and subtraction. In Book 3 elementary processes are illustrated through the activities of two third-grade children. The same method is continued in Books 4 and 5, using social situations familiar to pupils of the fourth and fifth grades.

Fundamental Arithmetic

By R. Schorling, J. R. Clark, and R. R. Smith. Cloth, xiv-368 pages. World Book Company, Yonkers, N. Y.

This arithmetic text for first-year junior high school classes emphasizes five aspects of numbers: (1) it repeats the fundamental processes; (2) suggests numerous applications of direct measurement; (3) applies computations to a wide variety of personal activities of children; (4) provides repeated examples of quantity relationships and uses typical formulas; (5) requires the pupil to analyze verbal and numerical problems as a means of attack. The book has a well-arranged group of review units.

Spelling to Write

By Arville Wheeler & Clyde B. Moore. Seven books for grades 2-8. 52 or 56 cents. D. C. Heath & Co., Boston 16, Mass.

Each book contains 36 lessons. A lesson begins with a picture and a story. This is followed by a directed study of the few new words in the story, and a test. The study is worked out carefully to impress upon the pupil the peculiarities of each word. There are periodic reviews, alphabetical vocabularies, and various study helps.

Aviation Readers

Six books by different authors. The Macmillan Co., New York 11, N. Y.

Straight Up, by Henry B. Lent, a first reader, introduces the helicopter. *Straight Down*, the second book, by the same author, tells about the parachute. *Planes for Bob and Andy*, by Huber, Salisbury, and Gates, already known to teachers as one of the *Core-Vocabulary Readers*, is the third book in the *Aviation* series. Others are *Men Who Gave Us Wings*, by Rose N. Cohen, history and biography; and *Aviation Science for Boys and Girls*, by Charles K. Arey.

The vocabulary of each book is controlled according to grade for which the book is intended. The books are planned as supplementary readers, to acquaint the children with the science and history of aviation and to promote air-mindedness.

A Study of Expenditures and Service in Physical Education

By Ruth Abernathy, Ph.D. Cloth, 113 pages. Price, \$1.85. Bureau of Publications, Teachers College, Columbia University, New York, N. Y.

This doctoral dissertation analyzes the outlay for plant and the costs of instructional and incidental services of high school physical-education programs in a group of New York State central rural schools.

The study found that plant costs for physical education are three times the average per cent per pupil expenditures for the total school program. Instructional expenditures on the high school level range from \$11 to \$31. In the course of her study, the author developed a useful formula for a reasonable teaching load for physical education instructors.

VERSATILITY to Meet *any* Teaching Need

The Bausch & Lomb LRM Balopticon meets every still projection need in the classroom or school auditorium. It is a versatile teaching aid which will handle any type of material . . . slides, photographs, pages in books or magazines, drawings, even actual specimens. It gives the instructor complete freedom of choice in material to illustrate his talks. Balanced illumination provides brilliant screen images which are of equal intensity whether projection is from

lantern slides, printed material, or opaque objects.

A built-in blower cooling system and extremely rugged construction round out the features that adapt it so well to its many uses in the up-to-date school . . . the same features that have contributed so much to its usefulness as a military instruction instrument.

Preference rating required for delivery. Bausch & Lomb Optical Co., Rochester 2, N. Y.



BAUSCH & LOMB

ESTABLISHED 1853

MAKERS OF OPTICAL GLASS AND A COMPLETE LINE OF OPTICAL INSTRUMENTS FOR MILITARY USE, EDUCATION, RESEARCH, INDUSTRY, AND EYESIGHT CORRECTION AND CONSERVATION





READY!

You always find Von Duprin exit devices ready for action.

Day after day they do their work surpassingly well, no matter whether that means daily operation by a thousand children rushing home from school, or emergency action when fire or panic strikes . . . and quick exit becomes a matter of life or death.

Von Duprins are always ready because they are made to stand up under the wear and tear of daily operation, to take the terrific strain of emergency demands, to deliver safe, sure, instantaneous exit under every possible condition.

They are built with painstaking care . . . to do the job for which you buy them.



FAIRMONT'S NEW SALARY SCALE

The board of education at Fairmont, Minn., has taken action renewing the contracts of the present staff of teachers for the year 1945-46. The board has approved a new scale of salaries, which is intended to set a pattern for schools of comparable size in the state. In the belief that the American system of education is one of the agencies through which an intelligent understanding of national and world problems can be brought to future generations of students, and realizing that schools need the services of competent, well-trained teachers, the board has provided a salary scale which will attract and hold such teachers in the profession. The maximum salary for men teachers has been set at \$3,000, for women \$2,000, and for women in the elementary grades \$1,800. Increases in salary will be made on the basis of merit, but no extra amount will

be allowed for advanced degrees. To encourage continued professional study, extra allowances will be given for attendance at summer school.

NEW KENNETT SALARY SCHEDULE

The board of education of Kennett, Mo., has adopted a new teachers' salary schedule, to become effective in September, 1945. The schedule, which is based on training and experience of teachers, provides definite monthly and annual salaries.

Teachers with 120 or more semester hours of training and less than two years' experience will be paid an annual salary of \$1,125; teachers with 90 to 100 semester hours of training and two or more years of experience will receive \$1,125; teachers with 90 to 100 semester hours of training and three years' experience will receive \$1,170; those with 100 to 110 semester hours of training and four or more years' experience will

receive \$1,215; teachers with 110 to 120 semester hours of training and four or more years' experience will be paid \$1,260; teachers with 120 semester hours of training and two years' experience will be paid \$1,215; teachers with 120 or more semester hours of training and three years' experience will be paid \$1,260; teachers with 120 or more semester hours of training and four or more years' experience will be paid \$1,305.

High school teachers with 120 semester hours of training and less than two years' experience will receive \$1,350; teachers with 120 semester hours of training and two years' experience will be paid \$1,395; teachers with 120 semester hours of training and three years' experience will be paid \$1,440; those with 120 to 130 semester hours' training and four or more years' experience will be paid \$1,485; those with 130 to 140 semester hours' training and four or more years' experience will be paid \$1,530; those with 140 to M.A. degree and four or more years' experience will be paid \$1,575; those with a master's degree and four or more years' experience will be paid \$1,620.

BOARDS OF EDUCATION

► Benton Harbor, Mich. The school board has begun plans for a program of educational assistance to returning war veterans. It is proposed to establish a veterans' institute, to be conducted under board of education auspices and as a part of the school system.

► Haverhill, Mass. The school board has given a 15 per cent increase to 36 janitors and engine-room workers. Nine clerks will each receive flat increases of \$100 per year, retroactive to January 1, for the duration.

► Marblehead, Mass. The school board has made a request for funds to construct a stadium in the rear of the high school.

► Eldora, Iowa. The school board has cooperated with the Hrdin County Medical Society, in conducting X-ray tuberculosis tests of high school students, teachers, and employees. No compulsion has been brought to bear on any student or teacher who has been taking advantage of the service.

► St. Louis, Mo. The school board is sponsoring a series of training classes for supervisory workers on the summer playgrounds. The pay of playground workers has been increased to attract older and better trained men and women.

► Muscatine, Iowa. The school board has completed plans for the remodeling of the cafeteria kitchen in the high school, to increase the facilities. It is planned to open the new program in the spring.

► Manitowoc, Wis. The school board has waived for a year the requirement that teachers attend summer school. The change in rule was made because of transportation difficulties and the desire of faculty members to take war jobs.

► The school faculty of Black River Falls, Wis., were hosts to the members of the board of education and their wives at a 6:30 dinner on January 23. A delicious dinner was prepared and served by the junior home-economics class, under the direction of the instructor, Miss Emma Niendorf. After the dinner a program was presented, consisting of short responses by the members and an educational movie. Mr. Melvin Frank, president of the teachers' association, was in charge of the program.

► Newburyport, Mass. In order to aid the war effort, the school board has empowered the superintendent and principal of the high school to formulate a program under which senior high school girls may complete their senior year early and enter a local war plant. The services of the young women are needed in the local radar plant.

► Chicopee, Mass. The school board has given permanent salary increases of \$200 per year to seven school employees, the increases to be retroactive to January 1, 1945.

► Beverly, Mass. The school board has increased the temporary increment for school-building custodians and charwomen from 7½ per cent to 11 per cent, effective June 30, 1945.

Teachers' Salaries

NEW HUNTINGTON SALARY SCHEDULE

The board of education of the Union Free School District No. 1, at Huntington, N. Y., has adopted a new salary schedule for the school faculty and employees of the district, which will go into effect July 1, 1945. The schedule is the result of an extensive study made by a committee of the teachers' association.

Under the schedule, new increased maximum salaries are provided, to be attained through annual increments of \$100, including the first effective year of the schedule. Special allowances are to be made in excess of the schedule to cover extra duties performed and to meet the cost of transportation between school buildings. The annual cost-of-living adjustment of \$200, in effect for the past two years, is considered as part of the present salary in the adjustment of increments for the next fiscal year.

It is the opinion of the board that the revised schedule, without causing more than a nominal increase in the annual budget over the next few years, will prove of immeasurable value in aiding the schools to maintain the services of a competent teaching staff.

The new maximum salaries are: principal, senior high school, \$5,500; principal, junior high school, \$5,000; principal, elementary school, \$4,000; teacher, senior or junior high school, \$3,200; supervisor, elementary school, \$3,200; teacher, elementary school, \$3,000; accountant, \$3,000; senior stenographer, \$2,000; junior stenographer or junior clerk, \$1,500; superintendent of buildings, \$3,600; building custodian (male), \$2,300; building custodian (female), \$1,300.

TEACHERS' SALARIES

► Rock Island, Ill. The school board has adopted a salary schedule, providing for substantial increases based on the amount of professional education and years of experience in the city schools. Teachers' salaries will begin at \$1,200 for a teacher without experience and with the minimum required education. The maximum salary of \$2,600 will be paid to teachers holding a master's degree and who have had eighteen years of experience.

► Palestine, Tex. Teachers generally are drawing larger salaries beginning with this school year. Salary increases given by the school board a few months ago, plus additional raises made possible by a \$4 per capita raise in state aid, has added substantially to the still underpaid tutors.

It is estimated that the average teacher will draw 20 per cent more pay this year over the last year. The salaries are, however, still below the national average.

► Appleton, Wis. The school board has approved a plan, prepared by the teachers' committee, for an adjustment of teachers' salaries to bring them in line with the state average. Teachers holding degrees will receive \$1,550 for the first year, with annual increases of \$75 until a maximum of \$2,400 is reached.

► Marshalltown, Iowa. The school board has approved a new salary schedule, prepared by the teachers' committee, which provides new starting salaries of \$1,350 to \$1,710 for the first year's service, and raises of \$45 per year up to the maximum of \$1,710 to \$2,025.

► LaSalle, Ill. The school board is again offering this year bonuses of from \$300 to \$360 to teachers in the high school and junior college. In addition to the salaries on a fixed schedule, the board ordered that \$360 be added to the salaries of the administrative and office staff for the school year 1944-45 to help offset the increase in the cost of living.

♦ Warwick, R. I. Maximum annual salaries of all teachers have been raised \$52 under a revision of the salary schedule. The beginning salary of elementary teachers has been raised to \$1,200.

♦ Fall River, Mass. The school board has adopted a recommendation, providing for a con-

HILLYARD



FLOOR TREATMENTS

AND

MAINTENANCE PRODUCTS

Tested AND Approved

★ Hillyard's Non-skid Floor Treatments and Maintenance Products properly protect and make attractive all types of floors, insuring a safety factor of non-slippery floor surfaces easy to keep clean. They produce sanitary, labor saving conditions. In every classification, Floor Seals; Finishes; Waxes; Dressings and Cleaners, they give entire satisfaction.

★ There is a Hillyard Floor Treatment Engineer near you. Call or wire us today, his advice and recommendations are given without obligation.

THE HILLYARD CO.

....DISTRIBUTORS HILLYARD CHEMICAL CO., ... ST. JOSEPH, MO.

tinuance of the \$200 temporary salary allowance, and for a further salary allowance of \$100 per year for all regular school employees.

♦ Huntington, Mass. The school board has given each teacher in the high and grade schools a cost-of-living adjustment of \$100, which is to be retroactive and payable in ten installments.

♦ St. Louis, Mo. The school board has rejected a petition of the teachers for cost-of-living increases of \$100 for the remainder of the school year. An unbalanced budget was the main reason for refusing the request.

♦ Jackson, Ga. The Butts County board of education has adopted a new rule that teachers who enroll in professional courses to better prepare themselves for teaching will be given salary increases of \$1 per semester hour. The new rule is intended to encourage teachers to take special training courses.

♦ Milwaukee, Wis. Teachers and civil service employees now on military leave will be granted

all the privileges of those now at school, under the terms of a resolution presented to the school board by Mr. Willard Bowman. While those in the armed forces now are entitled to salary increments and other benefits under the rules, they are not entitled to sick leave accruing during their absence. The resolution gives teachers on probation the same rights as regular teachers and places substitutes on the preferred list for immediate assignment.

♦ North Platte, Neb. The teacher retirement system, adopted by the board of education four years ago, is operating successfully. Two teachers who had reached the age of 65, have retired and are drawing a monthly retirement allowance. The reserve fund has steadily grown during the four-year period, and the plan has proved popular with the teachers and the local citizens.

♦ Fredericktown, Mo. The school board has adopted a new sick-leave policy, giving each teacher five days sick leave, without loss of pay.

Everybody

recognizes the name Eberhard Faber on School Pencils as marking a quality which is unquestionably and always "Sound Value". The fact is just as evident to taxpaying parents as to teachers and older pupils. It perhaps is the "plus" reason to which school administrators lend weight in guiding the placement of purchase contracts.

Eberhard Faber School Pencils have always been an outstanding value for economy of wear.

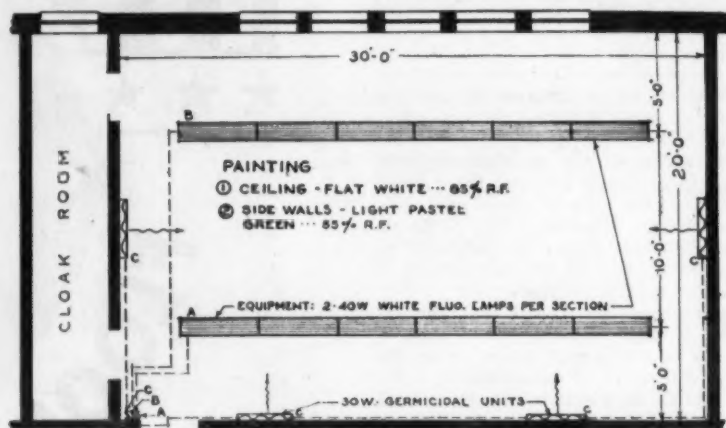


THE OLDEST PENCIL FACTORY IN AMERICA

BETTER SCHOOL LIGHTING POSSIBLE

(Concluded from page 49)

president emeritus of the Birmingham City Board of Education of which he was a member for 20 years. The P.T.A. paid for the lighting fixtures, the stoker, and the blinds. The county board of education installed the



TYPICAL CLASSROOM LAYOUT

wiring and the heating plant and redecorated the rooms.

The lighting job was engineered by the Birmingham Electric Company, local utility, and L. J. Campbell, sales representative of the incandescent lamp department of the General Electric Company. As a patron of the school, Mr. Campbell took a personal interest in the job and supervised the installation. Since that time the school has been visited by lighting and school people from all over Alabama.

PERMANENT TEACHER TENURE VERSUS SCHOOL-BOARD AUTHORITY

(Concluded from page 38)

popular opinion may determine that the only salvation for the schools is to change superintendents. If this is done honestly, much diplomacy may be necessary for both the new administrator and the board to avoid a serious upset by trying to clean house of alleged incompetents too rapidly. On the other side of the argument there is always the feeling on the part of teachers that if they were good enough to serve a considerable number of years, they have a vested right to continue to serve, even though they may not be as good as they think they are. Here enters the whole philosophy of social security.

Should Jobs Be "Permanent?"

In the last analysis such an extreme case as the one under discussion finds greatest importance in its emphasis that if the schools are to be kept close to the local people who have organized the school district, who pay the taxes to support the schools, and who elect the school board to represent them, the responsibility of decision must rest with the board for the reason that the state legislature cannot practically envision the details which come up in numerous intricate cases.

Tenure laws are still young. They are under trial. In some cases they have been abandoned. They may not always work for the good of

the community without working hardship on a few individuals. Particularly may this be true in borderline cases. It is a question whether using the word "permanent" in connection with the application of tenure laws is ever justified. Possibly, if the drafting and interpretation of the laws gradually pointed away from the idea of "permanence" to the

idea of providing fair treatment in dismissals for reasonable cause, all concerned would be better served.

SCHOOL ADMINISTRATION

► The Joint Committee on Buildings and Legislation of the Milwaukee board of school directors has suggested that the board permit the liberal use of school buildings for educational purposes. These purposes may include the discussion of current events and issues. Under the board's adult education program, it will be feasible to permit forums on current issues in the schools. These forums, under the rules, may not indulge in politics, but current issues, whether political, economic, or social, may be freely discussed where there is a public demand.

► The Coalville High School, at Coalville, Utah, has become the local center of recreation for the school patrons and the young people of the community. Under the direction of the faculty, the high school is the scene each Friday of a play, a basketball game, a dance, a musicale, or a lecture. The gymnasium is open three nights weekly to interested groups of adolescents and adults for basketball and gymnastics.

► Chicago, Ill. Mr. Don C. Rogers, assistant superintendent of schools, in a recent statement, showed that the schools have 9684 less pupils than a year ago. The elementary school enrollment has dropped 9071 to 252,163, and the high school enrollment declined 613 to 107,044. The declining enrollment in the grade schools is in direct ratio to a low birth rate several years ago. The decline in the high school figure was less due to the effort to keep pupils in school.

► Madison, Wis. The school board has approved a long-term plan, prepared by Carl H. Waller, for improvement of the guidance program. The plan calls for a teacher-counselor system and for a reduction of the teaching load of some teachers so that they may take over the guidance work.

► Coalville, Utah. In the North Summit district, the school shop is open two evenings each week to adults who are being taught farm machinery and repair and the building of farm structures. The men are encouraged to bring their machinery to the school for repairs and are taught the most economical method. Farmers desiring to build farm structures are given expert supervision in the work of construction.

► St. Louis, Mo. A course in plastics is being offered in the Hadley Technical High School. J. Kenneth Craver, of the St. Louis Plastic Club, is instructor.

As the Nation Depends on its Schools,
its Schools Depend on

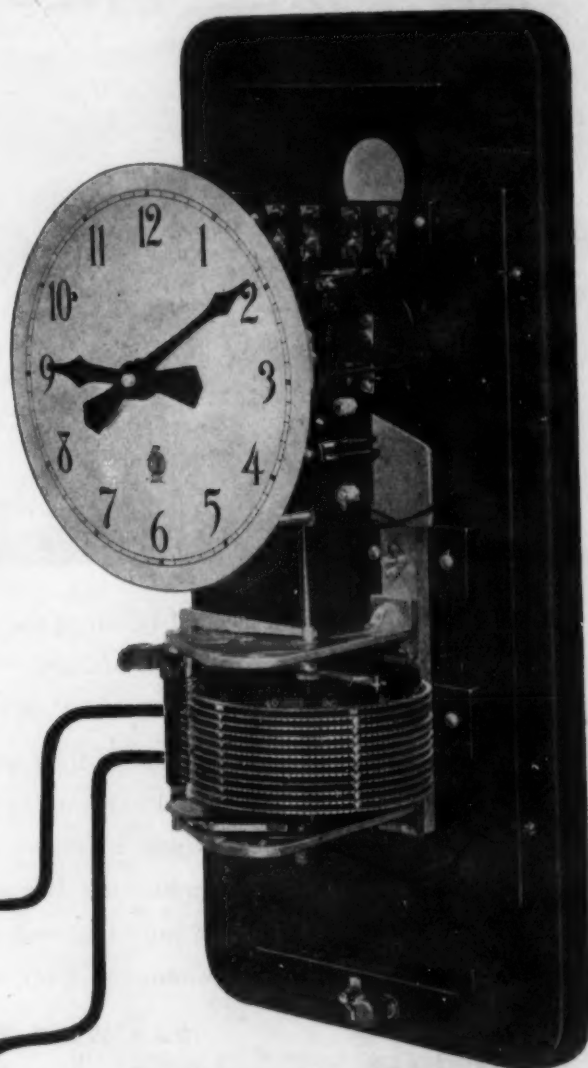
NATIONAL

CLOCK AND AUTOMATIC SIGNAL EQUIPMENT

for

PUNCTUALITY

A nation taught to be punctual in the formative days at school will be ON TIME when it counts most. YOUR School Dismissal Signals will be On Time with the accuracy of Arlington, with NATIONAL Clock Equipment on the job. ONE MOTOR drives EVERYTHING and provides Arlington time even to the quarter minute, to all units—and NATIONAL clocks are so sturdy, so simple, they require no technical service.



National Program Clocks are available for 1-2 1/2, -3, or 5-minute ringing periods; automatic week-end silencing; with control for as many as 4 different schedules. . . Shown above is a one minute interval, 24-hour Program Clock with cover removed.

NATIONAL ELECTRIC Clock Equipment is used in leading schools all over America. Write us for complete information.



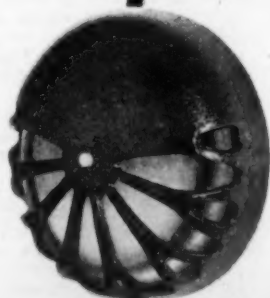
National 704 AC, 4-inch vibrating bell, Standard Type.

A Simple Hook-Up Automatic Signal Control on 2 Circuits

Diagram illustrates a typical National installation for schools, with Program Clock and three signal outlets; other types—any number of outlets, may be used.



National 804 AC, 4-inch Monitor Type Bell.



Right: National 810 FG-10" Monitor Type Gong with full grid to protect bell wired on a separate circuit for the Playground.

NATIONAL ROOM CLOCKS

Single face models; also double face corridor clocks; all styles are motor driven; all keep time with Arlington accuracy; require no special wiring—a range of sizes for all requirements.



Style 010 single face Room clock. Standard dial sizes — 10", 12", 15" and 18".

Tune in with NATIONAL—and CORRECT Time!

NATIONAL TIME & SIGNAL CORPORATION

600 E. MILWAUKEE AVENUE

DETROIT 2, MICHIGAN

ALL PRESENT!



NOW days the general health of the students is of vital importance to most school officials. They are concerned with the individual attendance record of each pupil.

The school washroom can be a focal point for the spreading of disease. Students should be encouraged to wash their hands as much as possible — and a sanitary, efficient towel service should be provided. Mosinee towels made from pure sulphate material are providing such a service in thousands of school washrooms every school day.



Member of National School Service Institute.

BAY WEST PAPER COMPANY

Green Bay, Wisconsin

A Division of Mosinee Paper Mills Co.

Mosinee **SULPHATE TOWELS**
PREP-TOWLS • ZIP-TOWLS • TURN-TOWLS • ROLTOWLS

PERU IMPROVES ITS ARITHMETIC INSTRUCTION

(Concluded from page 31)

objects will provide for growth of meanings, meanings that are the very core of arithmetic teaching and learning.

Achievement goals are set up, yet the limitations of these goals are recognized. "It is impossible to set up a standard of achievement for all first-grade children, or even for all first-grade groups. Differences in mental maturity of the various pupils and differences in environmental experiences make it impossible to prescribe a course in arithmetic for all first-grade classes."

A fairly comprehensive bibliography indi-

cates the source of material of the study.

Undoubtedly many would disagree with the work of this committee. Some probably would criticize it as too formal, ultra-conservative, etc. Still others might suggest that the goals set up for first-year attainment are inadequate to warrant giving the time needed to make their realization possible.

None whose privilege it has been to work cooperatively with a group of teachers seeking to find a solution to a real and vital problem will question the validity of the procedure. The growth of the teachers and the value to our school system of the exchange of ideas thus made possible will outlive the pronouncements of the committee as set forth in the mimeographed bulletin.

Personal News

BURGIN E. DOSSETT NAMED COMMISSIONER OF EDUCATION

Burgin E. Dossett, appointed on January 24 as Commissioner of Education for Tennessee, succeeds B. O. Duggan who has retired after the completion of a six-year term in that office.

Mr. Dossett, a native of Campbell County in East Tennessee, attended the elementary schools of Campbell County and the Jacksboro High School. He is a graduate of the University of Tennessee, holds a bachelor of arts degree, and a master's degree given by Harvard University.

Following his graduation from Harvard, Mr. Dossett was named principal of the Campbell County High School. For four years he taught history and education at the University of Tennessee summer school. Later he became superintendent of Campbell County schools, and was re-elected three times. He served eight years as superintendent during the crucial period of the economic depression, and managed to conduct eight and nine-month school terms and pay the teachers in cash.

MR. ROGERS RETIRES

Frederick P. Rogers, secretary and purchasing agent of the board of education at Jamestown, N. Y., for the past twenty years, is retiring from the office on June 1. Upon his retirement, Mr. Rogers and his wife will make their home in the old homestead near Bangor, Me.

Mr. Rogers was first employed by the Jamestown board of education in January, 1922, when he was appointed assistant superintendent of buildings and grounds. Two years later he was named secretary and purchasing agent, and in 1938 was also appointed board treasurer.

Mr. Rogers was graduated from the Michigan Military Academy. He served in World War I as a major with the Signal Corps. He has been widely known among school-business executives as a leader in the American Association of School Business Officials.

NEWS OF OFFICIALS

► T. M. WATTS has resigned as secretary of the school board at Holstein, Iowa, after a service of thirty-five years.

► The school board at Dublin, Ga., has reorganized with JAMES L. KEEN as president; GUY V. COCHRAN as vice-president; and CHARLES U. SMITH as treasurer.

► BERNARD E. MAIN has been elected secretary of the school board at Mason City, Iowa. He succeeds the late R. L. James.

► SUPT. R. W. GIBSON, of Eagle Grove, Iowa, has been appointed a member of the advisory committee of the thirteenth annual schoolmen's conference.

► The school board at Athens, Ga., has reorganized with DR. J. K. PATRICK as president, and L. M. SHADGETT as secretary-treasurer.

► ERWIN E. HOMSTAD, clerk of the board of education at Black River Falls, Wis., has recently been elected president of the Wisconsin Retail Lumbermen's Association. Mr. Homstad has been vitally interested in the city schools and has been responsible for many constructive changes.

► HAROLD P. HERRINTON has been appointed acting engineer of the board of education at Grand Rapids, Mich.

► DR. FRANCIS X. DUFAULT has been elected president of the school board of Athol, Mass.

► LEWIS H. BROTHERTON has been appointed business manager of the board of education at Kansas City, Kans.

► PROF. CHARLES EDWARD AMORY WINSLOW, of the Department of Public Health of Yale University, has announced his retirement, to take effect at the close of the school year in June. Professor Winslow, who is well known for his work in public health, had specialized in ventilation and had written several basic books on the subject.

► HARRY L. GAUSE has been elected a member of the board of education at Indianapolis, Ind., to succeed Howard S. Young, Sr.

► MRS. HARRY CASE has succeeded Mrs. H. W. Cole as a member of the school board at Perry, Iowa.

► GEORGE M. MAYES, a member of the school board at Meredosia, Ill., died recently at his home.

► CARL C. BYERS has been re-elected superintendent of the Parma public schools, Parma, Ohio, for a term of five years, beginning July 1. Mr. Byers, the youngest superintendent in any Ohio city with more than 5000 population, became superintendent in Parma on July 1, 1942. Under his new contract, Mr. Byers' salary will be \$5,500 for the first year, \$5,750 for the second, and \$6,000 for the last three years.

► C. J. SHEVES, of Gainesville, Ga., has been re-elected for his twelfth consecutive term.

► The school board at North Adams, Mass., has reorganized with the election of MICHAEL L. MONAHAN as president and MRS. MARY BUFFINGTON as secretary.

► ROBERT S. BUTTERS, president of the school board at Springfield, Mass., died in a Springfield hospital on February 22, after a heart attack. He had been a member of the board for several years and had been president since January, 1945.

EASY... *easy as threading a needle*

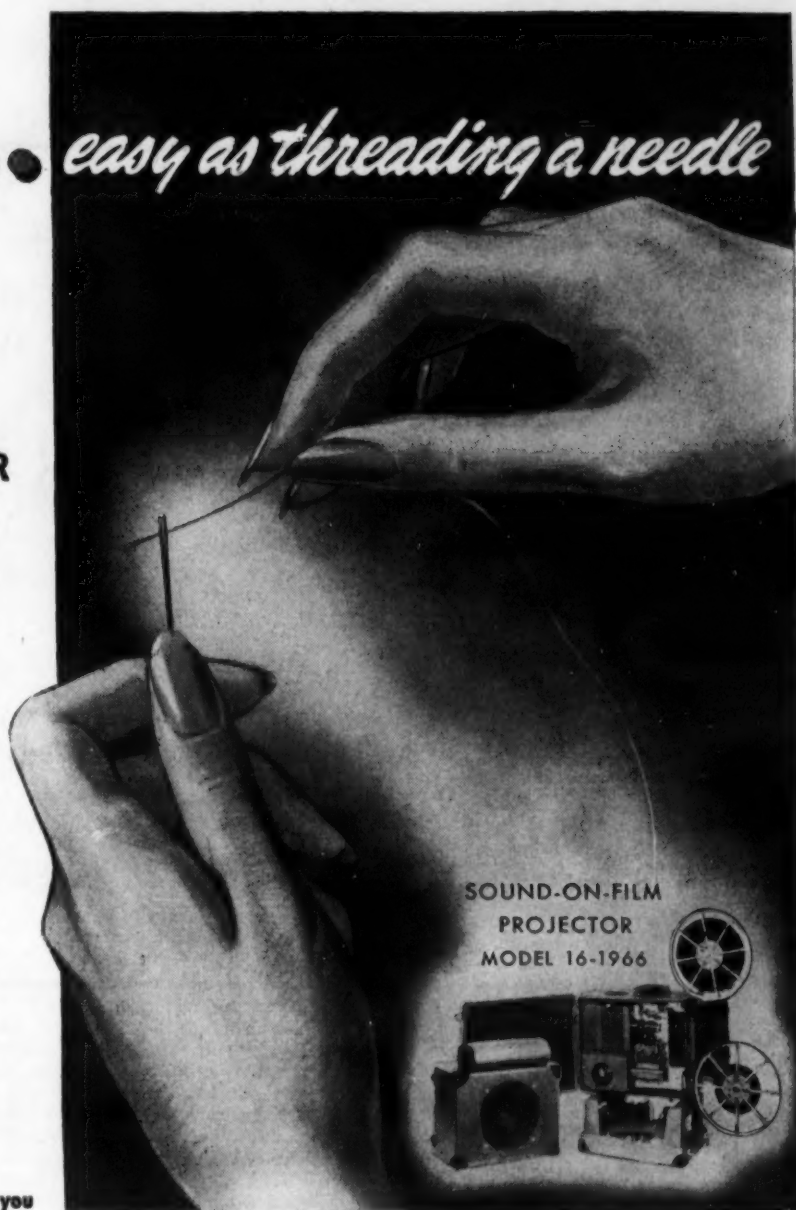
that's how easy it is
to thread the new

DEVRY

16mm. SOUND-ON-FILM PROJECTOR

Conveniently-accessible, free-moving controls make it easy for anyone to thread the new DEVRY 16mm. sound-on-film precision projector. A 12-year-old student (following the simple, clear direction chart) can easily and speedily thread, frame and focus a DEVRY. Specifically designed and built for sound film projection, your new DEVRY projects *both* sound and silent films. It projects *both* black and white or *natural* color without extra equipment. DEVRY motion picture projection is kind to the eyes... Its sound is "Nature-Real." Those who own them say, "Your best buy is a DEVRY." Separate 25 watt amplifier and sturdy 12" speaker make it possible quickly to transform your DEVRY into a lecture-study device for use with microphone or turntable... or a public address system for assemblies, athletic events, etc., indoors or out.

Self-contained in two easily carried, matched cases, DEVRY combines the best features of portable equipment with the stamina and stability of theater projectors. DEVRY portable units are built by those same master craftsmen who build DEVRY professional equipment for Hollywood and the world's finest theaters.



Place your order NOW with the DEVRY dealer nearest you

ALABAMA: American Seating Co.
407 N. 23rd St., Birmingham.

ARIZONA: O. B. Marston Supply Co.
324 N. Central Ave., Phoenix.

ARKANSAS: All State Supply Co.
412 E. Jackson Ave., Jonesboro.

CALIFORNIA: American Seating Co.
207 S. Van Ness Ave., San Francisco.
6900 Avalon Blvd., Los Angeles 3

COLORADO: American School Supply Co.
1817 California St., Denver 2.

FLORIDA: American Seating Co.
315 Masonic Temple Bldg.
Jacksonville.

GEORGIA: American Seating Co.
354 Nelson St. S. W., Atlanta 3.

IDAHO: Industrial Electronics Co.
1200 Gilson St., Portland, Ore.

ILLINOIS: DeVry Corporation
1111 Armitage Ave., Chicago 14.

INDIANA: Modern School Supply Co.
3810 E. 16th St., Indianapolis 7.

IOWA: Metropolitan Supply Co.
602 E. 16th St., Cedar Rapids.

KANSAS & MISSOURI: University Publishing Co.
1322 W. 13th St., Kansas City 1.

KENTUCKY: Office Equipment Co.
117 S. Fourth St., Louisville 2.

LOUISIANA: F. F. Hansell & Bro.
131-133 Carondelet St.,
New Orleans 12.

MICHIGAN: Michigan Products, Inc.
1226 Turner St., Lansing.

MINNESOTA: Farnham Stuy. & School Supply Co.
Lumber Exchange Bldg.
Minneapolis 1.

MISSISSIPPI: Mississippi School Supply Co.
116 E. South St., Jackson.

MONTANA & WYOMING: Colborn School Supply Co.
P. O. Box 1354, Billings, Montana

NEBRASKA: University Publishing Co.
1165 "Q" St., Lincoln 1.

NEW ENGLAND STATES: DeVry Corporation
52 Vanderbilt Ave., New York 17.

NEW MEXICO: Woodmansee School
& Office Supply Co.
302 E. Central, Albuquerque.

NORTH DAKOTA: Colborn School Supply Co.
184 N. Third St., Grand Forks.

OHIO: The Dobson-Evans Co.
305-307 N. Front St., Columbus 15.

OKLAHOMA: Oklahoma Seating Co.
17½ W. Main St., Oklahoma City 2.

OREGON: Industrial Electronics Co.
1200 N. W. Glison St., Portland 9.

PENNSYLVANIA: Clem Williams Films
803 Pitt Bank Bldg. Pittsburgh 22.

S. CAROLINA: American Seating Co.
842 Abelia Rd., Columbia.

SOUTH DAKOTA: Brown & Saenger, Inc.
120 W. Eighth St., Sioux Falls.

TENNESSEE: Asa Peterson
James Robertson Hotel, Nashville.

TEXAS: American Seating Co.
1118 Jackson St., Dallas 2.

VIRGINIA: J. H. Pence
P. O. Box 863, Roanoke.

WASHINGTON: Industrial Electronics Co.
1200 Glison St., Portland, Ore.

WEST VIRGINIA: D. E. Lovett
P. O. Box 1127, Clarksburg.

WISCONSIN: Gallagher Film Service
123 S. Washington St., Green Bay
641 N. 7th St., Milwaukee.

Since 1913 an
outstanding name
in the field of
Visual Education

DEVRY

New York • CHICAGO • Hollywood

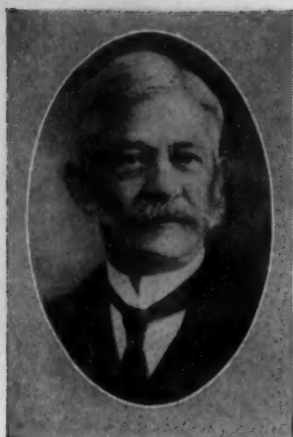
4-TIME WINNER

DEVRY ALONE has Earned FOUR Consecutive
Army-Navy "E's" for Excellence in the
Production of Motion Picture Sound Equipment.



ORIGINATORS AND IMPROVERS OF PORTABLE MOTION PICTURE PROJECTORS

Dealer: AS-B4
Address:
Free and without obligation, please mail me a copy of your new 1945 catalog
of now-available Projectors and other Audio-Visual Teaching Equipment.
Name Title
School
Address
City State



Perpetual Enemies of Textbooks

ROUGH HANDLING

WEATHER

DESK FRICTION

HOLDEN BOOK COVERS

keep books in active service that would otherwise have to be discarded.

A soiled book with frayed edges, dilapidated and unsightly does not command respect from the pupil—in fact,
invites continued destructive treatment.

SAMPLES FREE

HOLDEN PATENT BOOK COVER COMPANY

Miles C. Holden, *President*

Springfield, Massachusetts

A RURAL SCHOOL PROGRAM OF SUPERVISION

(Concluded from page 30)

work period often advocated. Workshop-type meetings in zone centers have been used with good results, although the time element is a serious limitation. One is compelled either to introduce a subject in the zone meeting and depend upon teacher initiative to complete the project later, or to assign a piece of work to be done in the classroom and brought into the meeting for evaluation.

A teacher's professional reference shelf in each school is a valuable asset, especially appropriate under current conditions when office help is lacking, materials are limited and many emergency teachers are being employed. Manuals, a teacher copy of seatwork books based upon texts, basic books on procedures, and informational bulletins should find a place on this shelf. This classroom professional shelf is more practical than the professional library provided in a supervisor's office, although the latter should be maintained.

To keep regular office hours in an area such as Sandoval County is impossible, for trips of 75 to 200 miles are required to visit an average of four teachers per day; however, an office tea hour at intervals, to which near-by teachers are invited, is a substitute of worth. Other headquarters may be used at times so that most of the staff may be reached in this informal and social manner. Perhaps some of the best results come out of this type of teacher get-together.

A leaflet entitled, "Teacher's Digest" has been found helpful in presenting excerpts from educational articles in current magazines, books, and newspapers that seem timely for the local school system. This leaflet also provides a means for making known the various activities being carried on by different teachers and constitutes a follow-up device.

Another successful procedure used in this school system, known as the Teacher Council, a teacher self-appointed committee interested in plans and policies, has accomplished such things as setting up an equitable salary schedule which was recommended to and adopted by the board of education. This group functions in keeping in contact with state educational affairs too. Other useful aids used in the maintenance program have been specific demonstrations by the supervisor in the classroom, listing of teacher contributions, and taking outside visitors to the classroom.

It has been found advantageous to review former objectives and bulletin material at intervals as a part of the maintenance program. A supervisor easily loses perspective in this matter. Having once made a recommendation, especially if it has been made in written form, she is likely to judge teachers to be careless and to forget that recall is always a necessity.

Teacher growth is the outcome of teacher activity. Each unit of growth leads forward. To co-ordinate and direct this growth is essential.

DETERMINING A SALARY POLICY

(Concluded from page 33)

of the issues mentioned here. These issues must be settled before the schedule can be developed and then adopted as a desirable policy. A schedule which has ignored these issues will not stand the test of time and staff morale. It is no easy matter to construct a schedule that will stand the test of practical year-by-year school operation. In the fall of 1942, the Judd Club of the University of Chicago Department of Education, under the direction of Dr. Reavis, made a study of salary practices in the schools of the Chicago

area. They found that 27 of the 45 high schools studied had schedules, but that 10 of the 27 have had to make appointments out of line with the schedules to maintain a proper staff. In other words, only 17 of the 45 high schools have salary schedules to which they can strictly adhere. A salary study group, inexperienced in the pitfalls of salary issues, may start out whistling in the dark as though an easily constructed salary schedule were the answer to all teachers' salary ills.

A salary policy should enable a school to attract and to hold competent personnel. It should enable the teacher to make the living adjustment to the school community which is conducive to good teaching. It should encourage professional growth while in service.

And finally — a salary study group in recommending a salary policy needs to appreciate the salary procedures which the board of education has been accustomed to following over a period of years. In School A, where a board of education of long service has been accustomed to operating without a salary schedule or an outlined plan, the usual bargaining procedures leave little promise that this board will accept a fixed salary schedule. It stands to reason that the more a committee's proposal represents a compromise, and the less it represents the opposite extreme of the customary procedures, the more likely it will be looked upon with favor. Yes, the work of salary study groups means labor, and not armchair proposals.



Encyclopaedia Britannica, for years the standard reference work of teachers and scholars, is in another field — that of visual education.

The advantages of motion pictures as a supplementary teaching medium have been conclusively demonstrated by educators and research groups. In Navy courses, it was found that students learn up to 35% more through the use of sound films — and that such learning is retained 55% longer. Sound films as methods of instruction are a part of the program of the Armed Forces, and many branches of industry utilize motion pictures for training.

Encyclopaedia Britannica Films Inc., through Erpi Classroom Films and the Silent Teaching Films (formerly Eastman), offers the most complete collection of sound and silent teaching pictures available. To this collection will be added further subjects, compiled with the accuracy, authenticity, and technical excellence synonymous with the name of Encyclopaedia Britannica.

Many schools recognize the value of audio-visual education with substantial budgets.

Your school budget (even the small budget) permits you to have your own film library right now! The new "Lease-to-Own" plan offers all schools a new, low-cost way to enjoy the benefits of a film library from the very beginning. You can have full library* use of all your films. Yet, payments on a year-to-year basis are as low or lower than film rentals. And the best part of all, there's no liability beyond the budget year. In 2 or 3 or 4 years the films become yours to keep. That's Lease-to-Own! Let us give you complete information without obligation. Fill in the coupon below and mail it today.

*The right film at the right place at the right time.

Encyclopaedia Britannica Films Inc.

A MILESTONE IN TEACHING PROGRESS!

ENCYCLOPAEDIA BRITANNICA FILMS Inc., Dept. 10-D
20 N. WACKER DRIVE, CHICAGO 6, ILLINOIS

Please send me, without cost or obligation

- ☐ Catalog of Erpi Classroom Films
- ☐ Catalog of Silent Teaching Films (formerly Eastman)
- ☐ Information on "Lease-to-Own" Plans

(Name)

(Your Position)

(Name of School)

(Address of School)

National Association of Teachers Agencies

Nationwide Assistance To Administrators

NO TEACHER interested in professional advancement overlooks the excellent, personal service rendered by *private* agencies. For over 100 years they have supplied the schools with good teachers.

ASSISTANCE is gladly given to teachers returning from service. Our membership of sixty agencies extends from coast to coast. All our offices are open the entire year to help teachers and administrators.

TEACHERS are urged to remain in the profession, to guide capable youth into it, and to secure the return of good teachers—this is a patriotic duty to the children of America.

ALL our members subscribe to a Code of Ethics, which sets forth high standards. Although in competition with one another, all cooperate to work for the best interests of the schools.

CALIFORNIA

McNeill Teachers Agency, Berkeley 4

COLORADO

Rocky Mountain Teachers Agency,
Denver
Western Teachers Exchange, Denver

CONNECTICUT

Cary Teachers Agency, Hartford

ILLINOIS

Albert Teachers Agency, Chicago 4
Clark-Brewer Teachers Agency,
Chicago 4
Fisk Teachers Agency & Am. Col.
Bureau, Chicago 4
Hughes Teachers Agency, Chicago 4
Illiana Teachers Agency, Champaign
Teachers Registry & Exchange,
Chicago 1

IOWA

Central Teachers Agency, Cedar Rapids
Clinton Teachers Agency, Clinton
Edwards Teachers Agency, Sioux City 13
McGowan Teachers Agency, Hampton
Midland Schools Teachers Agency,
Des Moines
Sabins' Educational Exchange,
Des Moines

MARYLAND

Baltimore Teachers Agency, Baltimore

MASSACHUSETTS

Grace M. Abbott Teachers Agency,
Boston
The Cary Teachers Agency of Boston,
Boston
Fisk Teachers Agency, Boston

MICHIGAN

Detroit Teachers Agency, Detroit 26

MINNESOTA

Clark-Brewer Teachers Agency,
Minneapolis 1
Educational Service Bureau, Minneapolis
Minnesota Teachers Service, Minneapolis
Schummers School Service, Minneapolis
Teachers Service Bureau, Mankato
Western Teachers Exchange, Minneapolis

MISSOURI

Clark-Brewer Teachers Agency,
Kansas City
Specialists Educational Bureau,
St. Louis 3
Wood Teachers Agency, Kansas City

MONTANA

E. L. Huff Teachers Agency, Missoula

NEBRASKA

Davis School Service, Lincoln

NEW YORK

Allied Teachers Agency, New York
American & Foreign Teachers Agency,
New York
The Associated Teachers Agency,
New York 15
Bardeen-Union Teachers Agency,
Syracuse 2
Clark-Brewer Teachers Agency,
New York 10
Co-Operative Teachers Agency, Buffalo
Educational Placements, New York 18
Interstate Teachers Agency, Rochester 4
Kellogg Teachers Agency, New York 3
Pratt Teachers Agency, New York 11
Schermershorn Teachers Agency,
New York 1

NORTH DAKOTA

Love Teachers Agency, Fargo

OHIO

Ohio Midland Teachers Agency,
Columbus 15
Schermershorn Teachers Agency, Cleveland

OREGON

Northwest Teachers Association,
Portland

PENNSYLVANIA

Bryant Teachers Bureau, Inc.,
Philadelphia
Central Teachers Agency, Harrisburg
Great American Teachers Agency,
Allentown
Pittsburgh Teachers Bureau, Pittsburgh

SOUTH CAROLINA

Southern Teachers Agency, Columbia

SOUTH DAKOTA

National Teachers Exchange, Sioux Falls

TENNESSEE

College & Specialist Bureau, Memphis
Southern Teachers Agency,
Chattanooga 8

UTAH

Yergensen Teachers Agency,
Salt Lake City

VIRGINIA

Southern Teachers Agency, Richmond

WASHINGTON

Clark-Brewer Teachers Agency, Spokane
Westmore Teachers Agency, Spokane 8

WISCONSIN

Parker Teachers Agency, Madison 3

POSTWAR FEDERAL EDUCATION PROGRAMS

(Concluded from page 20)

will be difficult to overcome. Fortunately for this aspect of the problem, the precedents established by the various depression agencies in the field of education are gathering dust and their personnel has been absorbed elsewhere. We may never have a better opportunity for a fresh start—right!

REDIRECTING PHYSICAL EDUCATION

(Concluded from page 25)

H

The next steps, of course, are to conduct programs of rest and activity, etc., in accordance with pupils' individual physical needs. If properly followed, any American senior high school may be raised in physical—and mental—stamina by 20 per cent or more in a single year, for the average of the entire school.

Is this worth doing?

I

We have not, in this article, indicated the actual activities to be followed in the various classes. Obviously this is a long story—a recital of details which need not greatly concern administrators or board members in the early stages of the new departures. Moreover, we have also ignored the highly controversial problem of control of interschool sports. We would strongly advise school executives to leave it alone until the basic physical fitness program has been thoroughly established. Then, intramural sports may be rationalized, utilizing physical fitness test scores. Then—at long last—the example of properly conducted in-school sports can be extended.

WAR BABIES

(Concluded from page 26)

schools. We must plan and plan now; we must prepare to change and continue to change.

Educational war babies must be weaned and parted from our schools. Industrial arts in junior high schools, however, is approaching adulthood and can render us mature service in our work for the future.

SCHOOL-BOND SALES

During the month of February, 1945, school bonds were sold in the amount of \$1,553,000. The reported average rate of interest as of March 1 was 1.46 per cent.

SCHOOL-BUILDING CONSTRUCTION

During the month of February, 1945, contracts were let in 11 states west of the Rocky Mountains, for 12 new school buildings, to cost \$996,680. During the same period, 4 projects were reported in preliminary stages, to cost \$402,500.

► SUPT. W. MARVIN KEMP, of Belle Fourche, S. Dak., has been re-elected for another year.

► J. R. BITNER has been elected superintendent of schools at Columbus, Neb., to succeed R. R. McGee.

► SUPT. E. L. STROH, of Bertrand, Neb., has been re-elected for another year.

► SUPT. G. W. WEIK, of Nehawka, Neb., has been re-elected for a third year.

► SUPT. EDGAR S. FARLEY, of Table Rock, Neb., has been re-elected for the next year.

► SUPT. A. V. GRASS, of Tecumseh, Neb., has been re-elected for his fourth year.

National Association of Teachers Agencies

President.....Joe Wilson
Detroit, Mich.

Vice-President.....S. J. Hansen
Minneapolis, Minn.



Secy.-Treas.....Hoyt S. Armstrong
Rochester, N. Y.

Chr. Pub. Com.....George R. Ray
Madison, Wis.

Help us serve you well—Order next term's school locks now!

You'll welcome the simplified administration which Dudley locks make possible, just as your pupils will welcome the surer protection from pilferers.

Besides those illustrated, the Dudley line includes master-keyed combination padlocks and built-in locker locks. AA2MRO rating. Help us give the service you want by ordering next term's locks now.



DUDLEY

LOCK CORPORATION

DEPT. 412 570 W. MONROE ST. CHICAGO 6, ILL.



Holmes machines are renowned, not only for their superior film projection, but also for the absolute fidelity, and rich, tonal quality of their sound reproduction.

Manufacturers of 16mm and 35mm Sound-on-Film Projectors for over 25 years to Dealers and Users



**HOLMES
PROJECTOR CO.**

1812 ORCHARD ST.

CHICAGO 14



3 LONG-WEARING SERVICEABLE BLACKBOARDS

ALL MADE WITH A
SUPER WRITING
SURFACE

Uniform in Color
Close Grained
Compact
Non-reflecting
Extra Hard
Long Wearing
Writes and erases easily
Saves on eraser wear

SLATOPLATE is backed with 5-ply pure spruce wood fibers laminated under great pressure into one-quarter inch panels. Special features: *light weight, shock-proof, economical.*

SLATEBESTOS backing is cement-asbestos composition formed into homogeneous, stone-like panels by hydraulic pressure, *making an indestructible blackboard.*

SLATEROCK backing is hydraulically formed core of refined gypsum rock surrounded by a tough, fibrous board. *As permanent as the school room wall.*

Write for Samples, Prices and Specifications for Installing.

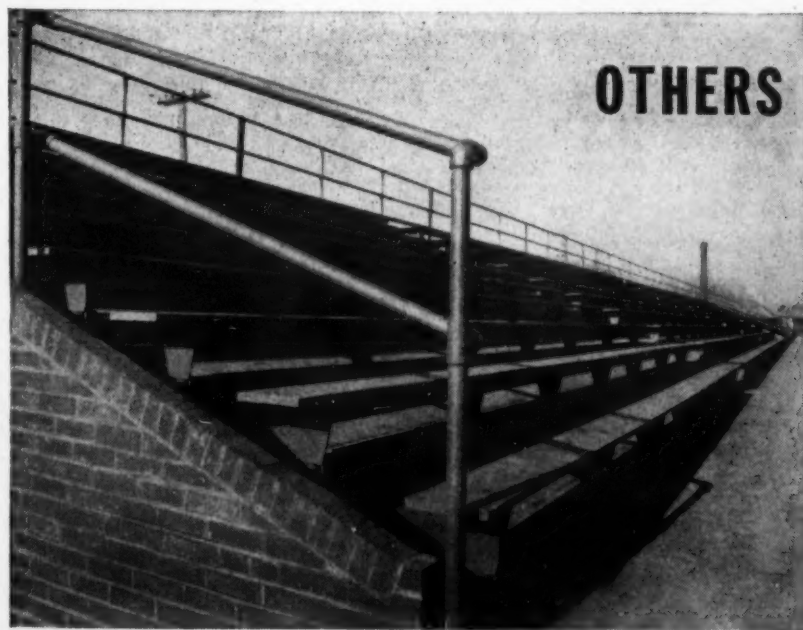
Catalog showing complete blackboard line and other equipment and supplies sent free on request.

SCHOOL BUYERS—Visit our showrooms whenever you are in Chicago.

BECKLEY-CARDY CO.

1632 INDIANA AVE.

CHICAGO 16, ILL.



Wayne Steel Deck Permanent Grandstand—This is one of several types of Wayne permanent grandstands. An advantage of this particular type is that locker and shower rooms may be located under stand.

OTHERS

**are placing orders NOW
for Wayne Grandstands**

• Leading schools and colleges are NOW ordering the grandstand equipment they need for postwar delivery. The list is growing fast. To avoid disappointing delay, follow their lead. No deposit required. When material and manpower are released for civilian production, your Wayne grandstands will be shipped on the basis of "first ordered, first shipped." Moreover, your order today will aid in insuring jobs for our discharged fighting men. If suggested layouts from our engineering department are desired, give complete details as to your requirements and we will send recommendations along with quotations.

"Wayne Stands



for Safety"

FOLDING & ROLLING GYMSTANDS • PORTABLE
GRANDSTANDS • PERMANENT STADIUMS

WAYNE IRON WORKS, 444 No. Pembroke Ave., Wayne, Pa.
Gentlemen: Please send copy of booklet—"Speaking of Postwar Plans."

YOUR NAME _____

SCHOOL _____

ADDRESS _____

TYPE STAND REQUIRED _____

New Supplies and Equipment

Production, Service, and Sales News for School Buyers

FOLD-PAK PORTABLE SCREENS

The new Radiant Fold-Pak screen is ideal for use on stages or for outdoor gatherings wherever a large, brilliant screen is needed for projection purposes. Sizes 7 by 9 feet, 8 by 10 feet, 9 by 12 feet, 11 by 14 feet. The unit consists of a light but sturdy, rustproof, collapsible steel frame with springs to hold screen smooth and flat, supported on legs that raise the screen as high as 5 feet above the ground. The "Fold-Pak" screen fabric can be folded, is washable, and possesses unusual brightness. Fits when dismantled, into a compact, portable, lightweight carrying case.

Radiant Manufacturing Corp., 1140 West Superior Street, Chicago 22, Ill.

For brief reference use ASBJ-410.

THACKERAY'S "VANITY FAIR" DRAMATIZED

William Makepeace Thackeray's novel, "Vanity Fair," has been dramatized on "The World's Great Novels" for four weeks starting Friday, Mar. 9 (NBC, 11:30-12:00 MID, EWT). Carl Van Doren, author, biographer and critic, was the commentator on the first program. Script for "Vanity Fair" is by Frank and Virginia Wells. "The World's Greatest Novels," literary presentation of the NBC University of the Air, is supervised by Margaret Cuthbert. Frank Papp directs production.

National Broadcasting Company, University of the Air, 30 Rockefeller Plaza, New York 20, N. Y.

For brief reference use ASBJ-411.

LATE FILM RELEASES

Film-Definition. "One of the definitions," to the true definition of a classroom film, which received greatest acclaim, "from many collected," not only defines a classroom film, but also defines a product. Encyclopaedia Britannica classroom films are professionally produced to be used by teachers as an integral part of the regular school curriculum. Inherent is the factor of authenticity and that its use will result in desirable learning.

The Erpi Bulletin, the fifth edition of the book by Dr. H. A. Gray, to help teachers and administrative officers on how to use the classroom film to best advantage, has just been released. This edition is the first in a series of teacher service bulletins. It brings up to date the integration of Erpi Classroom Films with various subject matter at different grade levels.

Encyclopaedia Britannica Films, Inc., 20 N. Wacker Drive, Chicago 6, Ill.

For brief reference use ASBJ-412.

His Butler's Sister (Universal). No. 2556. 9 reels. Young singer finds her brother a butler, instead of a millionaire, as she had been led to believe. But he becomes unwilling steppingstone to audition with his boss, and the girl finds happiness at last at—the annual "Butlers' Ball." Available from May 26, 1945, for approved nontheatrical audiences.

You're a Lucky Fellow, Mr. Smith (Universal). No. 2595. 6 reels. Marriage between willful heiress and young soldier proves highly inconvenient when hubby introduces some much-needed reforms. Very funny, much of action takes place in pullman car, side-tracked because of a fictitious measles scare. Available from April 22, 1945, for approved nontheatrical audiences.

Bell and Howell Company, 7100 McCormick Road, Chicago 45, Ill.

For brief reference use ASBJ-413.

FLUORESCENT LIGHTING EQUIPMENT

The lifting of manufacturing restrictions on commercial fluorescent lighting equipment has made the Wakefield "Grenadier" again available, subject, however, to priority regulations. A new 8-page catalog section (No. 11-44) giving dimen-

sional data, photometric performance, and layout design helps has just been issued by the manufacturer.

The F. W. Wakefield Brass Co., Vermilion, Ohio.

For brief reference use ASBJ-414.

PERSONAL MENTION

Mr. Ralph J. Teeple has been appointed General District Sales Manager of the New York District of American Chain & Cable Company, Inc. Mr. Teeple has been with the Page Steel and Wire Division of the company for 23 years, and for the past 5 years he has been New York District Sales Manager for the Page Steel and Wire Division.

J. J. Walsh, who has been associated with the company for 22 years, has been appointed District Sales Manager for the New York District of the Page Steel and Wire Division of American Chain & Cable Company, Inc., with headquarters at 230 Park Avenue, New York.

Messrs. Nelson and Morse Elected

At the Twenty-Eighth Annual meeting of the National Association of Fan Manufacturers held at Hot Springs, Va., the following officers were elected for the ensuing year: R. H. Nelson, president; C. T. Morse, vice-president. Mr. Nelson is president of the Herman Nelson Corporation, Moline, Ill., and Mr. Morse is president of the American Blower Corporation, Detroit, Mich.

FARADAY MOVES TO CHICAGO

Faraday Electric Corporation moved its executive, sales, and advertising offices to Chicago about March 1 to 11 South La Salle Street, Chicago 3, Ill. Among those moving to Chicago from the plant at Adrian, Mich., will be Paul H. Hill, vice-president in charge of sales, Joseph E. Fanning, assistant sales manager, Herbert W. Schild, advertising manager, Paul G. Taylor, manager of Merchandise Division, Frederick T. Mayer, manager of Cornice Division, and F. E. Howell, manager of Transportation Division. Midwest District Office, W. W. Morean, manager; and Branch Office, C. L. Hobbs, manager, will also be maintained at the same address.

ARMY-NAVY "E" AWARDS

Underwood Elliott Fisher Company, Hartford plant, Hartford, Conn., have won the Army-Navy production award for excellence in the manufacture of war materials. They will fly the production award pennant and employees will be given Army-Navy "E" pins.

For the fourth time in less than two years, the Heywood-Wakefield Company's Gardener, Mass., plant has been awarded the Army-Navy "E" production award. The official notification signed by Robert P. Patterson, Under Secretary of War, lauded the Company's willingness to devote almost its entire productive effort to the home front battle for production.

John J. Nesbitt, Incorporated, State Road and Rhawn Street plant, Philadelphia, has been notified by the Under Secretary of War of the award to them of a second White Star for their Army-Navy production award flag, for high achievement in the production of war material, and as a symbol of their "continuing contribution to the cause of freedom."

Remington Rand, Incorporated, Johnson City, N. Y., have won the Army-Navy Production award for excellence in the manufacture of war materials.

PLAN DISPLAY ROOM FOR NEW YORK SCHOOLS

Mr. Maurice Postley, superintendent of school supplies for the New York City board of education, has endeavored to establish closer relations

between his bureau and the teaching staff. To this end he has recommended that two steps be taken in the postwar period when both supplies and personnel will be more plentiful than at present.

First, Mr. Postley would establish a display room at the headquarters where teachers and principals may inspect samples of the numerous items on the official supply list, ranging from thumbtacks to shop tools. Under his proposed arrangement, everything on the supply schedule would be available for inspection, including books, paper, pencils, crayons, paints, laboratory equipment, standard tests, and tools required for various types of shopwork.

A second step recommended is that members of the teaching staff be assigned on a rotation basis to the headquarters of the supply bureau, where they would serve on joint selection committees made up of teachers and employees of the bureau.

Mr. Postley believes that the plan would help teachers understand the scope of the work done by the bureau and some of the problems which confront it in purchasing and distributing the thousands of items the schools require. He points out that the bureau is far more than a medium for purchasing supplies. It is essentially a service bureau—testing materials, auditing bills, disposing of salvage materials, advising on the proper use of fuel, preparing statistical reports, and correcting errors on requisitions.

Publications for

School Business Executives

Costs Per Pupil in Average Daily Attendance in Ohio City School Districts, July, 1943 to June, 1944

By W. R. Flesher and T. C. Holy. Paper, 11 pages. Published by the Bureau of Educational Research, Ohio State University, Columbus, Ohio.

This tenth report of the Bureau of Research is an analysis for 1943-44, of expenditures for current expense, interest, debt retirement, and capital outlay for each pupil in average daily attendance in the 113 city school districts of the state. The per cents of increase in per pupil costs for current expense, instruction, and total payments for each of the three types of districts are given as follows: current expenses, 5.1; instruction, 4.0; total payments, 3.4.

List of Inspected Fire Protection Equipment and Materials, 1945

Paper, 176 pages. Published by the Underwriters' Laboratories, Inc., 161 Sixth Ave., New York, N. Y.

This list, which includes all listings up to January 1, 1945, replaces all previous lists and supplements of earlier dates. It contains summaries of listing card reports on appliances and materials examined with reference to fire preventive and fire protective capabilities, and to such fire hazards and accident hazards as are involved in the several groups.

The Kind of Work Disabled Veterans Can Do

Paper, 16 pages. Published by The Trundle Engineering Company, Bulkeley Building, Cleveland, Ohio.

Lists types of work which nine important types of disabilities can successfully perform.

Trends in Population and Public School Enrollment

By T. C. Holy. Paper, 5 pages. Prepared for the Conference on Postwar School Buildings, Indiana University, Bloomington, Ind.

A study of the Ohio population estimates, by five year periods, from 1935 to 1980, together with the age distribution of those estimates. It indicates the distribution of Ohio school enrollment for certain years 1927-1943, the percentages of families living in certain types of districts, with children attending the public schools, and points to certain economic and educational implications of these population trends.

Comparative Tax Rates of American Cities—1944

By Rosina Mohaupt. Paper, 6 pages. Reprinted from the National Municipal Review.

This report, the twenty-third annual tabulation of tax rates of cities over 30,000 population, is based on a study of 249 cities reporting during the years 1943 and 1944. It is shown that only 40 per cent of the 252 cities reporting in both 1944 and 1943 indicated decreases in the adjusted tax rate as compared to 53 per cent of the cities in last year's study. Thirty-nine per cent of the municipalities reported higher tax rates, and 21 per cent reported no change in tax rates since last year. Cities in group III of the higher populations showed an average decrease of 14 cents in adjusted tax rates in contrast with increases in all other groups.

After the Meeting

COLLECTED DEFINITIONS

A co-ordinator is a man who brings organized chaos out of regimented confusion.

A conference is a group of men who individually can do nothing, but as a group can meet and decide that nothing can be done.

A statistician is a man who draws a mathematically precise line from an unwarranted assumption to a foregone conclusion.

A professor is a man whose job is to tell students how to solve the problems of life which he himself has tried to avoid by becoming a professor.

An efficiency expert is a man who knows less about your business than you do, and gets paid more for telling you how to run it than you could possibly make out of it even if you ran it right instead of the way he told you to.

A consultant is an ordinary guy who is a long way from home.

An economist is a man who has a Phi Beta Kappa key on one end of his watch chain and no watch on the other.—*Journal of A.M.A.*

LAUGH—AND LEARN ENGLISH

Dr. Charles W. Roberts reproduces in the *Illinois English Bulletin* a series of college-freshman boners which appeared originally in *The Green Cauldron*. Here are a few:

Since George Washington, we have had some thirty odd presidents in the White House.

When we saw the Pacific, it was miles from the shore.

The next stand that we came to we'll eat.

Like all great Americans, Lee was called to his rest in the year 1870.

He knows the Bible like a book.

After a hard day's work I would return home and there on the table would be a giant dish of corned beef and cabbage, or a plate of Hungarian Goulash, and, of course, my wife.

Every seat was filled to capacity.

The quiet, unassuming young man who was almost in poverty, now lies in the nook of luxury atop the ladder of success.

I will be the butt of no leg pulling.

My brother has returned from three years of overseas duty, and is convalescing from wounds he received in battle at home.

Surprise

The class had just begun Vergil, and the instructor read with feeling the classic opening line: "*Arma Virumque Cano*." Then she turned to the little romantic girl in the front bench.

"How would you translate that?" she asked.

The girl's eyes grew misty. "I sigh for the arms of a man," she replied, and the class almost ended at that point.—*Daniel Lord*.

Teacher Was Pleased

The student reported sick and the teacher thought it was just a subterfuge.

He visited him. Found him with high temperature and a red rash.

Teacher: "I thought you were making an idle excuse, but I am pleased to see you are seriously ill."

Slightly

College Student: "Oh, Dad, I've just discovered that the girl who sits next to me in chemistry has a hat exactly like mine."

Father: "So I suppose you want me to buy a new one?"

Student: "Well, darling, that would be cheaper than changing schools."—*Wall St. Journal*.

Helping the Man-Power Shortage

Officially E. B. Lott is Superintendent of Rushville, Mo., schools, but . . .

During a teacher's illness he had to double in the classroom.

Last week the school's janitor-bus driver quit, and Mr. Lott had to take over, going to work at 4 A.M.

After school he's coach of the basketball team, and after Friday night's game he had to stay and sweep the gym.

Saturdays? He's a butcher in a St. Joseph meat market.—*Associated Press*.

Advertisers in this index are given a code number in addition to the page number on which the advertisement appears. Refer to the advertisement for product or services available. Write direct to advertiser or use the coupon in requesting information from a number of advertisers.

Code No.	Page No.	Code No.	Page No.
401 American Airlines, Inc.	63	430 Minneapolis-Honeywell Regulator Co.	3rd cover
402 Ampco Corporation, The	60	431 National Association of Teachers Agencies	78
403 Bausch & Lomb Optical Co.	69	432 National Broadcasting Company	67
404 Bay West Paper Company	74	433 National Lock Company	10
405 Beckley-Cardy Company	81	434 National Time & Signal Corp.	73
406 Bell and Howell	65	435 Nelson Corp., Herman	7
407 Bendix-Westinghouse Automotive Air Brake Co.	12	436 Nesbitt, Inc., John J.	14
408 Binders Board Manufacturers	79	437 Norcor Manufacturing Company	13
409 Bruce Publishing Company, The	8	438 Page Fence Association	12
410 Crane Company	11	439 Peabody Company, The	10
411 DeVry Corporation	75	440 Pittsburgh Plate Glass Co.	2nd cover
412 Dick Company, A. B.	3	441 Premier Engraving Company	12
413 Ditto, Incorporated	10	442 Professional Directory	80
414 Dudley Lock Corporation	78	443 RCA Victor Div. Radio Corp. of America	53
415 Eberhard Faber Pencil Co.	72	444 Royal Metal Mfg. Co.	2
416 Encyclopaedia Britannica Films, Inc.	77	445 Schermerhorn Teachers Agency	80
417 Faraday Electric Corp.	4	446 Sheldon & Company, E. H.	61
418 Gaylord Bros., Inc.	79	447 Sloan Valve Company	1
419 General Electric Company	5	448 Spencer Turbine Company	56
420 General Motors Corporation, Chevrolet Motor Co. Div.	59	449 Standard Electric Time Co.	13
421 Hamilton Manufacturing Co.	66	450 Superior Coach Corporation	84
422 Heywood-Wakefield Co.	68	451 Todd Shipyards Corporation	6
423 Hillyard Company, The	71	452 Underwood Elliott Fisher Co.	55
424 Holden Patent Book Cover Co.	76	453 Universal Bleacher Company	13
425 Holmes Projector Company	81	454 University of Wisconsin	80
426 Huntington Laboratories, Inc.	64	455 Victor Animatograph Corp.	4th cover
427 Libbey-Owens-Ford Glass Co.	16	456 Vonnegut Hardware Co.	70
428 Medart Mfg. Company, Fred	9	457 Warren Webster & Co., Inc.	58
429 Merriam Company, G. & C.	80	458 Wayne Iron Works	81
		459 Weber Costello Company	62
		460 Wyandotte Chemicals Corporation	57

FOR INFORMATION USE THIS COUPON

The advertisements in this issue have been given a code number for your convenience in requesting information on products, services, booklets, and catalogs offered. Encircle the code number of the advertisement in which you are interested, clip and mail the coupon to the AMERICAN SCHOOL BOARD JOURNAL. Your request will receive prompt attention. BRUCE—MILWAUKEE.

American School Board Journal

540 North Milwaukee St., Milwaukee 1, Wis.

Please send information offered in the advertisements we have encircled.

401	402	403	404	405	406	407	408	409	410	411	412	413	414
415	416	417	418	419	420	421	422	423	424	425	426	427	428
429	430	431	432	433	434	435	436	437	438	439	440	441	442
443	444	445	446	447	448	449	450	451	452	453	454	455	456
457	458	459	460										

Also information on

Name

Please Print

Title

School

City

State